

## CHAPTER 8: THE SUPPLY OF ENERGY MINERALS

### 8.1 COAL AND COLLIERY SPOIL DISPOSAL

- 8.1.1 Coal has been a very important mineral resource in the UK and has played a major role in the development of the country. It has been mined for several centuries to utilise the energy that can be obtained from its combustion and other forms of processing. That energy has been harnessed to fuel industrial development and it has also been one of the main sources of domestic heating.
- 8.1.2 The abundance of coal resources in Derbyshire has shaped the way the county now looks and operates, particularly along the eastern area, around Swadlincote in the south and Glossop in the north-west. Coal mining has traditionally been one of the main employment sources in the area, providing up to 60,000 jobs in the 1950s and 1960s. As a result of the use of imported coal supplies and the move away from coal as a source of energy generation, the Derbyshire industry declined significantly thereafter and all deep mined collieries in the County closed by the mid-1990s. In more recent years, coal production in Derbyshire has largely been from surface mining apart from one small drift mine at Eckington, which closed in early 2019.
- 8.1.3 Demand for coal as an energy source in the UK has reduced significantly in recent years as a result of government policies to address climate change and reduce greenhouse gas emissions, most obviously through the planned closure of the remaining old style coal-fired power stations with lower carbon alternatives by 2024. Future demand for coal in the UK during the plan period is likely to come from the industrial sector, including steel and cement production, although advances in technology and use of alternative fuels are also likely to result in reduced demand from the sector in the long term. In this context, it is unlikely that coal will be extensively worked again over the plan period but, as the Plan area still contains substantial resources which could be extracted by either surface mining or deep mining methods, it includes a policy approach for any proposals that do come forward.

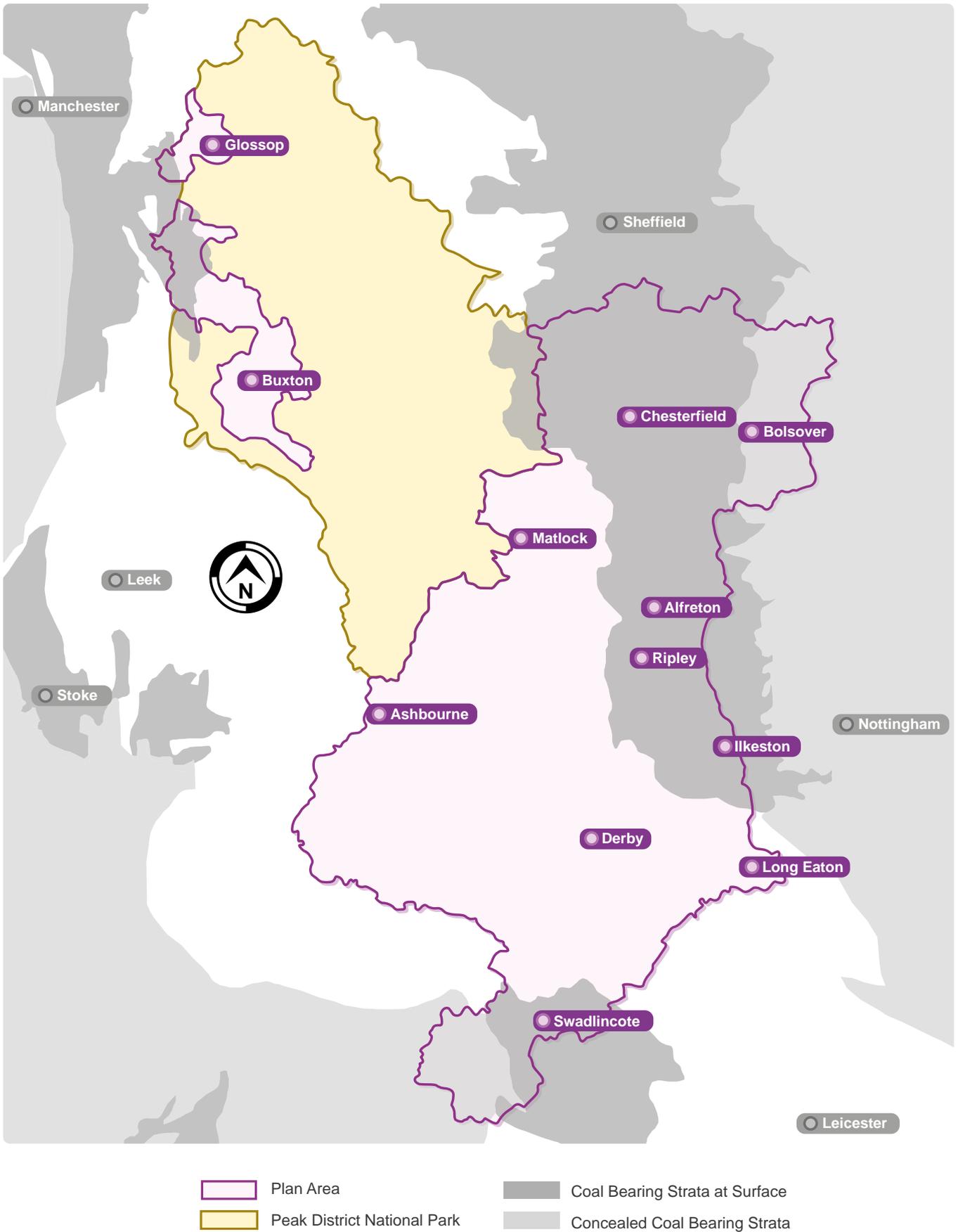
#### HOW IS COAL EXTRACTED?

- 8.1.4 There are two principal methods of extracting coal. Where coal seams are at shallow depths below the surface, i.e. within the 'exposed coalfield' area, the coal can be extracted by surface mining methods. Where the seams are deeper, underground methods are employed. The Coal Authority defines shallow mining as extraction at depths of less than 30m but surface mining can take place at much greater depths. Both methods have been used in Derbyshire, and in some cases both have been used at the same site with surface mining taking place at former deep mine collieries.

## COAL IN THE PLAN AREA

- 8.1.5** Derbyshire contains both shallow and underground coal resources (see Figure 8.1.1 below). The shallow coal resource in Derbyshire is found primarily in two areas, the North Derbyshire Coalfield and the South Derbyshire Coalfield, although shallow coal deposits also occur in the north-west of the County, mainly outside the Peak District National Park boundaries between Charlesworth and Whaley Bridge, but these are not, generally, of commercial quality.
- 8.1.6** The North Derbyshire Coalfield, which covers an extensive tract of the County extending southwards from the northern county boundary, near Killamarsh, to Belper and Ilkeston in the south/ south west, is the southern part of the much wider Yorkshire/Nottinghamshire/ Derbyshire Coalfield. The coal seams vary in thickness up to several metres and, in Derbyshire, around 30 seams in all are substantial enough to be worked commercially.
- 8.1.7** The South Derbyshire Coalfield is located south-east of Burton-on-Trent and covers an area of approximately 36km<sup>2</sup>. It is contiguous to the west, beyond the Neverseal fault, with the East Staffordshire area of concealed coal measures and is connected to the adjacent Leicestershire Coalfield to the east by the north-west trending Ashby anticline. Coals are known from the Lower, Middle and Upper Coal Measures. The main seams are the Upper Kilburn, Block, Little, Little Kilburn, (Over & Nether) Main, Little Woodfield, Lower Main, Woodfield, Stockings, Eureka, Stanhope, Kilburn, Fireclay and Yard. The seams in the South Derbyshire Coalfield produce mainly high volatile bituminous and non-coking coals. Seams in the South Derbyshire Coalfield are fairly shallow, typically less than 450m in the deepest parts of the coalfield.
- 8.1.8** The underground coal resource in Derbyshire is located to the east of the main Derbyshire shallow coal measures, below an area of Permian Limestone. Whilst there is no potential for surface extraction in this area (the thickness of the limestone beds would make this uneconomic), there may be some potential for underground mining or methods such as underground coal gasification and coal bed methane extraction, although the presence of historic mine structures may preclude this. More information on extraction methods which seek to utilise gas from coal seams can be found in Chapter 8.2: Conventional and Unconventional Hydrocarbons and Gas from Coal.

FIGURE 8.1.1: DERBYSHIRE SHALLOW AND UNDERGROUND COAL RESOURCE



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- 8.1.9** The underground working of coal at major collieries creates large volumes of waste or 'spoil', the disposal of which is one of the main potential causes of environmental impacts. Despite the cessation of large-scale deep mine production in Derbyshire, the remaining spoil tips are part of the legacy of the mining industry. Some of the tips have been completely removed as part of redevelopment schemes whilst many others have been restored and landscaped. These restoration schemes often involve re-profiling of the tips rather than complete removal but this, in combination with the landscape planting, reduces the appearance of the tips and helps them be assimilated into the surrounding area. Some of the materials which were previously placed in the tips as unwanted and unusable waste materials (including mudstone, siltstone and red shale) now have a commercial use, as low grade aggregate for example, and several tips have been reworked to extract this previously discarded resource. The tips can also include quantities of coal which is now recoverable due to the availability of improved processing equipment. More information and policies relating to the reworking of former mineral workings can be found in Chapter 11: Development Management - Other Mineral Related Issues.
- 8.1.10** The geological conditions that gave rise to the creation of coal also support the presence of clay. In Derbyshire, brick clay has been extracted from the coal measures of the exposed coalfield covering the North Derbyshire Coalfield. Further detailed information about brick clays can be found in Chapter 7.3: Brick Clay and Fireclay. The southern part of Derbyshire is an important source of fireclays.
- 8.1.11** Fireclays are sedimentary mudstones that occur as seatearths or fossil soils that underlie almost all coal seams. Fireclays are typically thin (normally <1m, although rarely 3m) and extraction on their own would not be economically viable because of the high overburden to mineral ratios. In contrast to brick clays, which are normally red-firing due to the presence of iron oxides, fireclays have relatively low iron contents and are particularly valued for the production of buff coloured bricks and pavers. Bricks made from fireclay also exhibit superior technical properties, such as strength and durability.

## NATIONAL POLICY

### National Planning Policy Framework (NPPF)

- 8.1.12 National policy<sup>86</sup> states that minerals planning authorities should “*indicate any areas where coal extraction and the disposal of colliery spoil may be acceptable*” and also that they should “*provide for coal producers to extract separately, and if necessary stockpile, fireclay so that it remains available for use*”<sup>87</sup>.
- 8.1.13 Contrary to the approach set out for most minerals the NPPF also adopts a negative approach to coal extraction, only permitting development where it would be environmentally acceptable or where the benefits of the development would outweigh any adverse environmental impacts. It states that, “*Planning permission should not be granted for the extraction of coal unless: a) the proposal is environmentally acceptable, or can be made so by planning conditions or obligations; or b) if it is not environmentally acceptable, then it provides national, local or community benefits which clearly outweigh its likely impacts (taking all relevant matters into account, including any residual environmental impacts*”<sup>88</sup>.
- 8.1.14 The NPPF does not contain any targets for coal production, either from underground sources or by surface mining. It states that decisions concerning the supply of energy derived from different fuels is a matter for the markets, reinforced by long-term policy measures. However, it also requires that planning policies should safeguard mineral resources by adopting Mineral Safeguarding Areas so that known locations of specific mineral resources of local and national importance are not sterilised by non-mineral development<sup>89</sup>, as well as, at paragraph 204 (d), encourage the prior extraction of minerals, where practical and environmentally feasible, if it is necessary for non-mineral development to take place<sup>90</sup>. More information about mineral safeguarding areas and incidental mineral extraction can be found in Chapters 9.1: Safeguarding Mineral Resources and Chapter 11 Development Management - Mineral Related Issues.

### National Energy and Climate Change Policy

- 8.1.15 An important consideration relating to the supply of energy minerals is the Government’s Energy Policy which has evolved to put net zero and the efforts to fight climate change at its core. The Climate Change Act in 2008 set the UK’s legally binding 2050 target to reduce greenhouse gas emissions by at least 80% relative to 1990 levels. The Target Amendment Order of 2019 has seen the percentage increased to 100%.

87 Paragraph 215(e), revised NPPF, July 2021

88 Paragraph 217, revised NPPF, July 2021

89 Paragraph 210 (c), revised NPPF, July 2021

90 Paragraph 210 (d), revised NPPF, July 2021

91 Planning Practice Guidance, Paragraph 174, Reference ID: 27-147-20140306, March 2014

8.1.16 Whereas coal had previously formed the mainstay of indigenous energy supply, the November 2015 Written Ministerial Statement (WMS) *“Priorities for UK Energy and Climate Change Policy”* made it clear that *“one of the greatest and most effective contributions we can make to emissions from electricity generation is by replacing coal fired power stations with gas.”* Since 2015, almost all traditional coal fired power stations have closed, with the remaining few now being planned for closure, or conversion to natural gas, before 2024. Demand for coal in the industrial sector, particularly in the production of steel and cement, still remains although changes in manufacturing processes for these materials as well as the proposed move to the use of low carbon alternative fuels such as hydrogen and electrification as set out in the government’s recently published Industrial Decarbonisation Strategy (BEIS 2021) is likely to result in a future further reduction in demand.

### Planning Practice Guidance (PPG)

8.1.17 PPG states that the environmental impacts of coal extraction should be considered in the same way as for other minerals<sup>91</sup>. However, both coal operators and mineral planning authorities must have regard to the environmental duty placed on them under section 53 of the Coal Industry Act 1994<sup>92</sup> when preparing and determining planning applications. In the case of the latter, this requires planning authorities to have regard, not only to *“...the desirability of the preservation of natural beauty, of the conservation of flora and fauna and geological or physiographical features of special interest and the protection of sites, buildings, structures and objects of architectural, historic or archaeological interest...”*, but also the extent to which an applicant has given consideration to these matters in the design of those proposals and any measures the applicant has adopted in order to mitigate any adverse environmental effects of the development on the environmental concerns identified above.

8.1.18 MPAs are also advised that underground coal mining can raise additional issues to surface coal mining which may need to be considered. These include: the potential effects of subsidence, including the potential hazard of old mine workings; the treatment and pumping of underground water; monitoring and preventative measures for potential gas emissions; and the method of disposal of colliery spoil<sup>93</sup>.

### NEED

8.1.19 As set out in paragraphs 8.1.13 and 8.1.15 above, in line with government energy and climate change policy, which seeks to reduce the use of fossil fuels and reduce carbon emissions, national planning policy adopts a negative approach to coal extraction and there are no national assessments of the need for coal.

92 Coal Industry Act 1994

93 PPG, Paragraph 148, Reference ID: 27-148-20140306, March 2014

94 BEIS (2019) Energy Trends Table 4.1

## SUPPLY

**8.1.20** Government guidance is that the volume and mix of energy mineral extraction is a matter for the relevant industries and markets to determine and there are no targets for the provision of coal. In recognition of the extent of the remaining commercially workable surface and underground coal resource in Derbyshire, combined with the current lack of a mining industry in the County, rather than identifying specific areas where coal extraction may be acceptable, as per paragraph 215(c) of the revised NPPF, the Plan adopts a plan wide approach to the entire surface and underground coal resource areas. This is considered a more flexible approach where all the remaining coal resources would be subject to appropriate detailed consideration in accordance with the policies in the plan and no areas were automatically excluded from future consideration. It would also avoid the potential for planning blight arising from the identification of specific sites or areas for future coal working. The responsibility for developing individual proposals would be placed in the hands of the mining industry.

**8.1.21** The safeguarding of mineral resources from non-mineral development may result in some incidental coal extraction from the shallow coal resource. Proposals for some unconventional forms of hydrocarbon development, such as hydraulic fracturing, coal bed methane dewatering or coal gasification, would potentially affect the deep coal resource. There is no national mineral safeguarding requirement for coal where it might be affected by coal bed methane or underground coal gasification.



LODGE HOUSE, PRE SOIL  
REPLACEMENT 2011

- 8.1.22 1) Proposals for the extraction of coal by surface mining methods and deep mined coal and the disposal of colliery spoil will only be supported where it can be demonstrated that the development satisfies the following requirements:**
- **that it is environmentally acceptable, or can be made so by planning agreements and obligations; or**
  - **if it is not environmentally acceptable, that it would provide national, local or community benefits of a scale which clearly outweigh the likely impacts (taking all relevant matters into account, including any residual environmental impacts).**
- 2) Proposals for the extraction of coal by surface mining methods and deep mined coal and the disposal of colliery spoil will only be supported where it can be demonstrated that the development satisfies the following requirements:**
- 3) Where appropriate, proposals for coal extraction should also make provision for the extraction and stockpiling of fireclays where it can be demonstrated that site restoration will be undertaken in a timely manner; it would enable the efficient use of the clay resource and the proposal would ensure that the clay resource would not be needlessly sterilised.**

## REASONED JUSTIFICATION

**8.1.23** All proposals for surface and deep mined coal extraction and the disposal of colliery spoil will be assessed against the overarching tests set out in Policy SP16: Coal Extraction and Colliery Spoil Disposal which reflects the requirements of paragraph 217 of the NPPF. The effects of coal extraction, colliery spoil and the reclamation of former colliery sites on local amenity will be measured against policy DM1: Protecting Local Amenity, which sets out the general criteria to be used in respect of all proposals for mineral development. The environmental acceptability of proposals for coal extraction and colliery spoil disposal will be assessed against Policy SP1: Sustainable Minerals Development, Policy SP2 Climate Change as well as the other development management policies which are contained within Chapter 11: Development Management Policies.

- 8.1.24 Where it cannot be demonstrated that a proposal for coal extraction would be environmentally acceptable, consideration of any national, sub-regional or local benefits delivered by the development will be undertaken in accordance with the terms of sub-paragraph 2 of Policy DM2: Criteria for Assessing the Benefits of Minerals Development Proposals. The list of benefits set out in the policy is not intended to be exhaustive. Where an applicant considers that a development proposal delivers benefits not included in sub-paragraph 2, but which would be a material consideration in the determination of any planning application, they should submit sufficient information to enable a full assessment of those benefits.
- 8.1.25 The MPA recognises that fireclay largely coincides with the coal resource and that it is usually most economically viable to be extracted with coal at surface coal sites. Policy SP16.3 allows for the extraction of fireclay in association with coal where it would not significantly delay restoration and where the prior extraction of coal meets the tests of environmental acceptability or delivery of benefits set out in policy SP16.1.

## 8.2 CONVENTIONAL AND UNCONVENTIONAL HYDROCARBONS AND GAS FROM COAL

- 8.2.1 Hydrocarbons include minerals such as oil and gas which provide a significant proportion of our energy supplies. They are also used as raw materials for the petro-chemicals industry and in the manufacture of drugs and plastics. In 2019, domestic production met 46% of the country's supply of gas, with the vast majority of this supplied from North Sea offshore production with a smaller proportion from the onshore oil and gas sector<sup>94</sup>.
- 8.2.2 The geological conditions where these resources are found has resulted in two categories of hydrocarbons, conventional and unconventional. Conventional oil and gas reserves can be typically exploited by drilling a well, with oil or gas then flowing out under its own pressure. Conventional deposits are contained in porous rocks with interconnected spaces, such as limestone and sandstone. These interconnected spaces give rise to permeability that allows oil or gas to effectively flow through the reservoir to the well. Unconventional oil and gas deposits are contained in impermeable rocks, such as shale or coal deposits. In these cases, the oil or gas cannot easily flow through the reservoir. To extract the oil and gases, techniques such as hydraulic fracturing (commonly referred to as fracking), coal bed methane dewatering or coal gasification are used.
- 8.2.3 Hydraulic fracturing is the process of opening and/or extending existing narrow fractures or creating new ones in gas or oil-bearing rock, which allows gas or oil to flow into wellbores to be captured<sup>95</sup>. These operations vary, in choice and volume of fluid injected, pressures and rates, depending on specific reservoir attributes. Typically, it involves the pumping of fluid, usually water pumped at high pressure into the rock. The water normally contains small quantities of other substances to improve the efficiency of the operation. Sand is often pumped into the fractures to keep them open and allow the gas to flow out. The fluids pumped into the shale are referred to as proppants (props to keep it open) and can include small quantities of chemicals. Hydraulic fracturing is not limited to unconventional resources but is more likely to be required to extract oil and gas from those deposits. In calcareous conventional resources, such as limestone, fracturing may take place involving the use of an acidic fluid which dissolves the rock to open up fractures (acidisation fracturing) and stimulate flow. The volume of fracturing fluid used can vary widely e.g. when used to stimulate the extraction of conventional resources the volume is typically much smaller than that required to extract unconventional resources.

95 PPG Paragraph: 129 Reference ID: 27-129-20140306 Revision date: 06 03 2014

96 British Geological Survey: UK Coal Resource for New Exploitation Technologies Final report. 2004

- 8.2.4 Coal mine methane (CMM) or abandoned mine methane (AMM) is extracted from active or abandoned underground mines following the natural accumulation of gas in the underground void. It is a simple process typically involving the collection and transfer of gas to a surface generating engine which burns the gas to produce electricity, often used to operate the mine if it is active.
- 8.2.5 Coalbed methane (CBM) is extracted from unworked coal seams. It is produced during the process of coal formation; the gas is either adsorbed onto the coal or dispersed into pore spaces around the coal seam. Wells are drilled into the coal seam; the well is then pumped to remove any water to enable the methane to be extracted. The dewatering reduces pressure which releases the methane. Development of coal bed methane usually involves the development of multiple wells in order to access a sufficient volume of resource.
- 8.2.6 Underground Coal Gasification (UCG) is an industrial process involving the controlled combustion of unworked coal seams beneath the ground and the recovery of the resulting gas. It is achieved, by drilling several wells into the coal seam. It requires a minimum of two wells; an access well to inject steam and air or oxygen to trigger and maintain the combustion of the seam and, a production well which recovers the resulting gas-water vapour mixture to the surface for treatment. Gasification produces a mixture of gases including carbon monoxide, carbon dioxide, hydrogen and methane that can be processed to provide fuel for power generation, vehicle fuels and chemical feedstocks. The surface footprint for underground gasification can be considerable depending on the scale of the project.
- 8.2.7 Shale gas (predominantly methane) is found within organic rich shale beds or other fine grained rocks with low porosity, rather than in a conventional reservoir of porous or permeable rock. Gas contained within shale is often referred to as 'unconventional gas' by contrast to 'conventional gas' obtained from sandstones or limestone although the gas produced is the same and is suitable for both industrial uses and energy supply. To recover the shale gas wells are drilled down to the shale beds. The drill shafts can consist of a single and direct vertical path to the shale bed. An alternative is horizontal drilling, in which the well trajectory is turned horizontally, sometimes running for thousands of feet along a layer of rock. A single horizontal well can access a much larger volume than a vertical well, reducing the number of wells that need to be drilled. The shale has to be broken or opened to enable the gas to flow out and be captured; this process 'hydraulic fracturing' is described at paragraph 8.2.3.

## HYDROCARBONS IN THE PLAN AREA

- 8.2.8** Historically oil and gas has been extracted within the Plan area on a small scale, mainly from conventional limestone resources, lying below the exposed coal measures. It was one of the first areas in Britain to be explored for oil in an attempt to shore up the nation's supplies during the First World War. In the first half of the 20th Century oil and gas was exploited successfully at Hardstoft, Calow and Ironville. Exploratory wells have also been sunk at Ridgeway, Bramley Moor, Renishaw, Whitwell, Shirebrook, Heath, Golden Valley (near Ripley) and Sawley. Recent production has been intermittent and small scale and the resources remaining underground are considered to be of limited extent. The potential for future hydrocarbon extraction is considered to be focused on gas rather than oil.
- 8.2.9** Methane gas is commonly found in coal measures; within the Plan area the main exposed coalfield lies in the eastern half of the County. A smaller area of concealed coal measures lies below the Permian Limestone in the north east of the County (See Figure 8.2.1). In the recent past AMM has been extracted from the now abandoned coal mines at Markham, Whitwell and Shirebrook. However, production is presently minimal and the potential for further extraction is considered to be low.
- 8.2.10** Other means of extracting gas from coal include coalbed methane (CBM) and underground coal gasification (UCG). The prime requirements for CBM prospects are unworked coal seams at depths of between 200 and 1500 metres together with good methane content of the coal. Whilst such factors are present in the Derbyshire coalfield, past coal mining will have affected the prospectivity of the area as coal extraction has the effect of lowering the pressure of the strata which causes gas to desorb from the coal. Former coal mining activity can also cause drilling problems (loss of circulation) if mud or water is used as a drilling fluid. Widespread degasification is likely to have taken place on the exposed Coal Measures, due to centuries of mining, thus the most prospective part of the area is likely to be the concealed coalfield, or those areas between more recently closed deep mines. However, collieries have existed all along the eastern side of the concealed North Derbyshire coalfield, from Whitwell to Shirebrook, so any unmined areas are likely to be small. Research by the British Geological Survey (BGS)<sup>96</sup> and a Department of Energy and Climate Change (DECC) paper<sup>97</sup> both indicate that the CBM prospects of both the North and South Derbyshire Coalfields are poor due to relatively low seam gas contents and uncertainty over the permeability of the coals. There have been no proposals for extracting hydrocarbons via CBM technology in Derbyshire and there is no known commercial interest at present.

97 Department of Energy and Climate Change (DECC) The Unconventional Hydrocarbon Resources of Britain's Onshore basins – Coalbed Methane (CBM) 2013

98 Previously published in S. Holloway, N. S. Jones, D. P. Creedy, K. Garner 'Can new technologies be used to exploit the coal resources

FIGURE 8.2.1: LOCATION OF COAL BED METHANE AREAS IN NORTH DERBYSHIRE COALFIELD

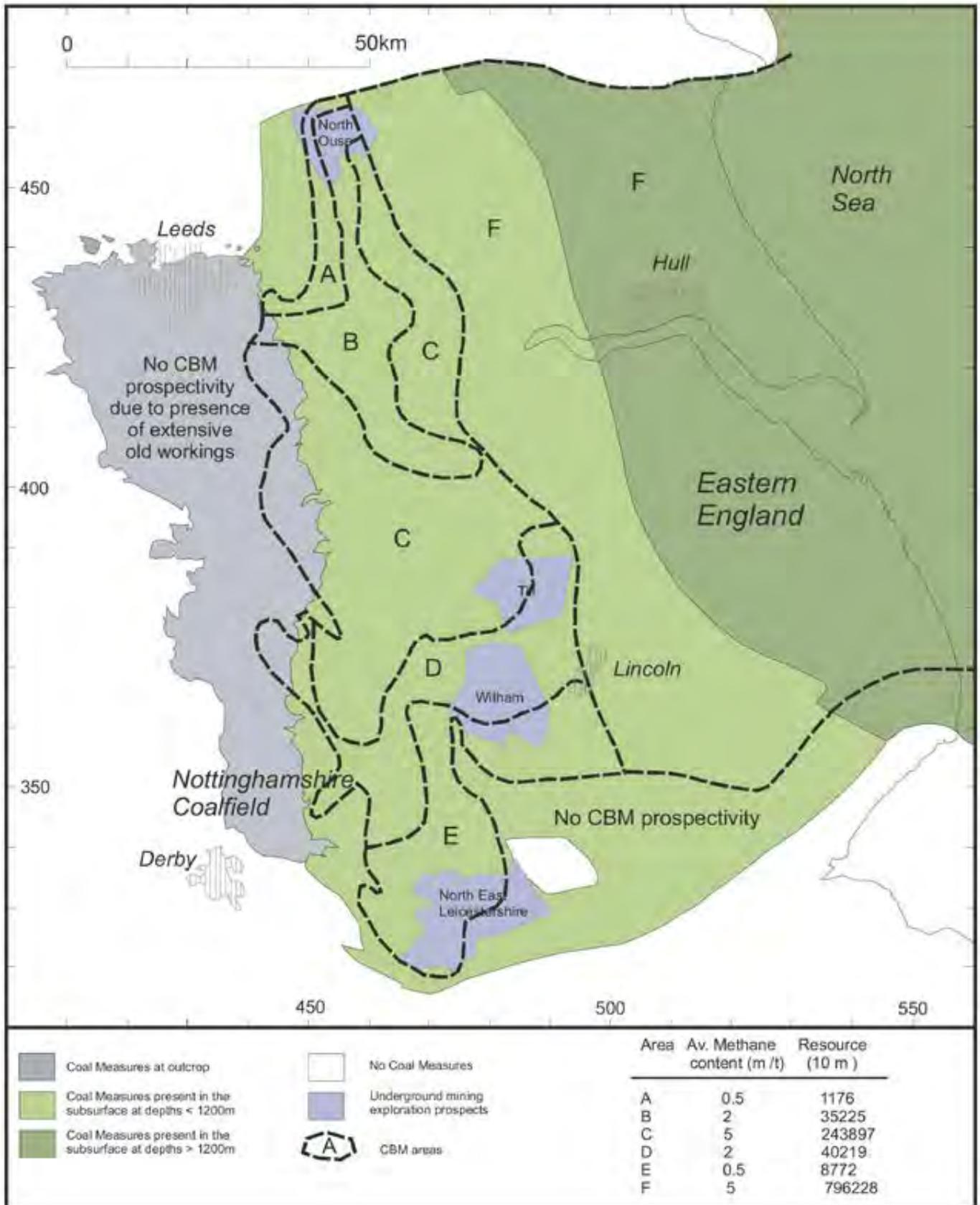


Image credit: Earthwise British Geological Society<sup>98</sup>

in the Yorkshire–Nottinghamshire coalfield?’

99 British Geological Survey: UK Coal Resource for New Exploitation Technologies Final report. 2004

FIGURE 8.2.2: SUMMARY MAP SHOWING UNCONVENTIONAL HYDROCARBON POTENTIAL, INCLUDING SOUTH DERBYSHIRE COALFIELD

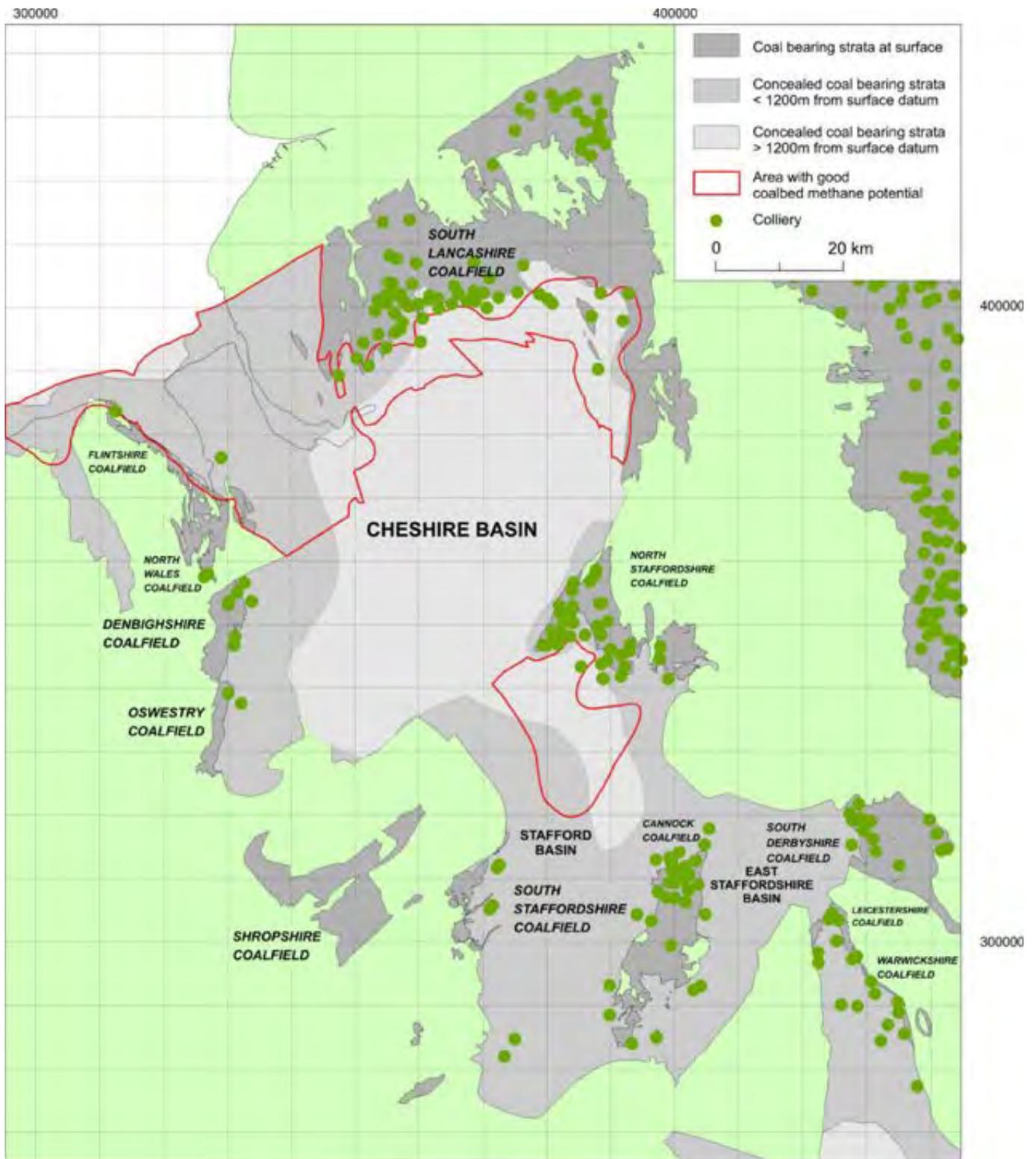


Image credit: DECC, (2013), page 31, 'The Unconventional Hydrocarbon Resources of Britain's Onshore basins – Coalbed methane (CBM)

**8.2.11** Requirements for underground coal gasification includes coal seams that are more than 2 metres thick at depth of between 600 and 1200 metres with more than 500m vertical and horizontal separation from historic mine workings and current coal licences , which would suggest that there is little or no potential in Derbyshire. This was confirmed by BGS research<sup>99</sup> which noted that the South Derbyshire Coalfield (Figure 8.2.2) did not form a UCG resource due to the extensive nature of former underground and the need to stand off from these workings, both vertically and horizontally. Prospects for UCG in the north Derbyshire Coalfield were also considered low due to the shallow nature of the Coal measures and the large number of former mine workings in this area. There have been no proposals for extracting hydrocarbons via UCG technologies in Derbyshire and there is no known commercial interest at present.

FIGURE 8.2.3 LOCATION OF UNDERGROUND COAL GASIFICATION RESOURCES IN EASTERN ENGLAND INCLUDING NORTH DERBYSHIRE

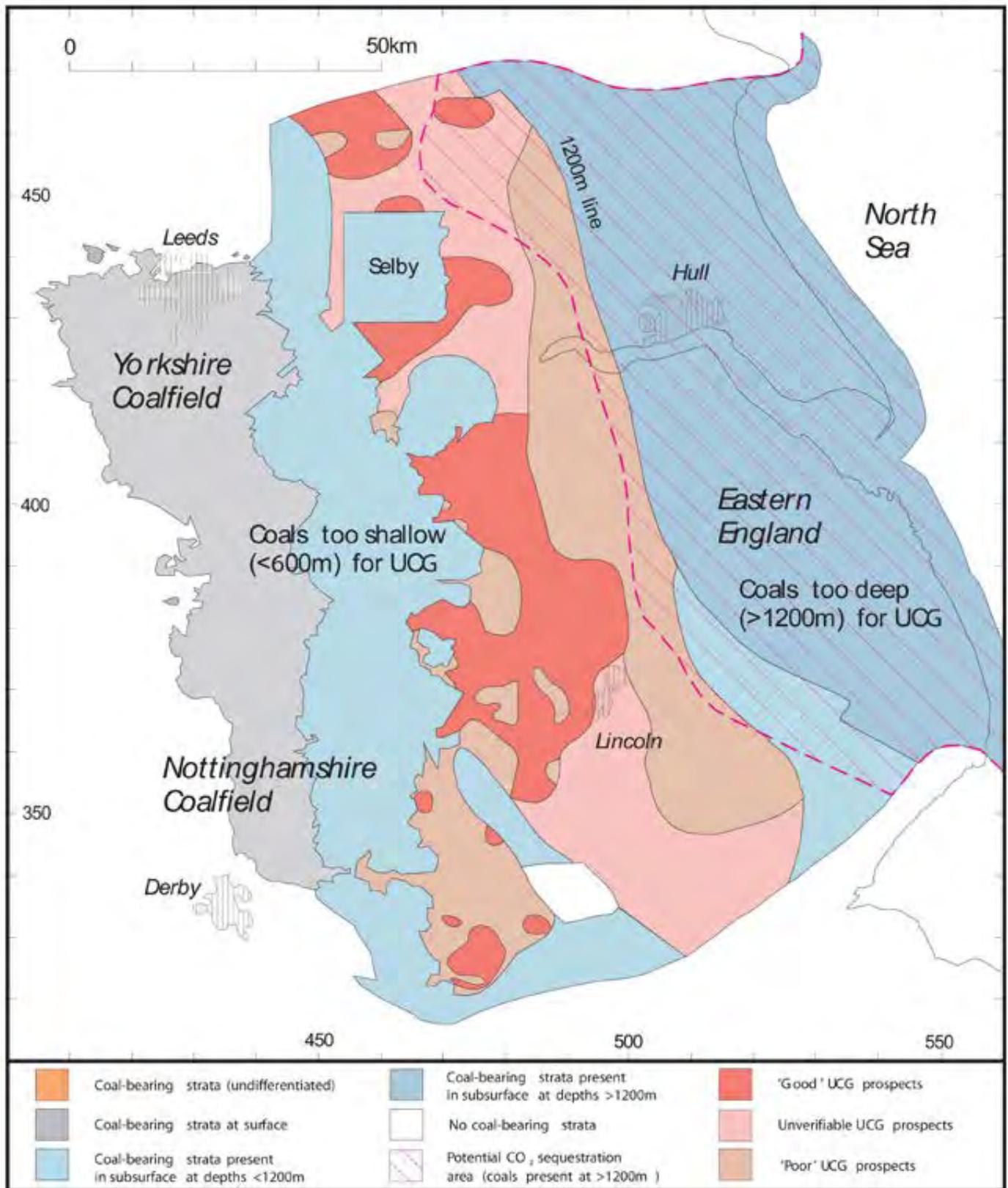


Image credit: Earthwise British Geological Society<sup>100</sup>

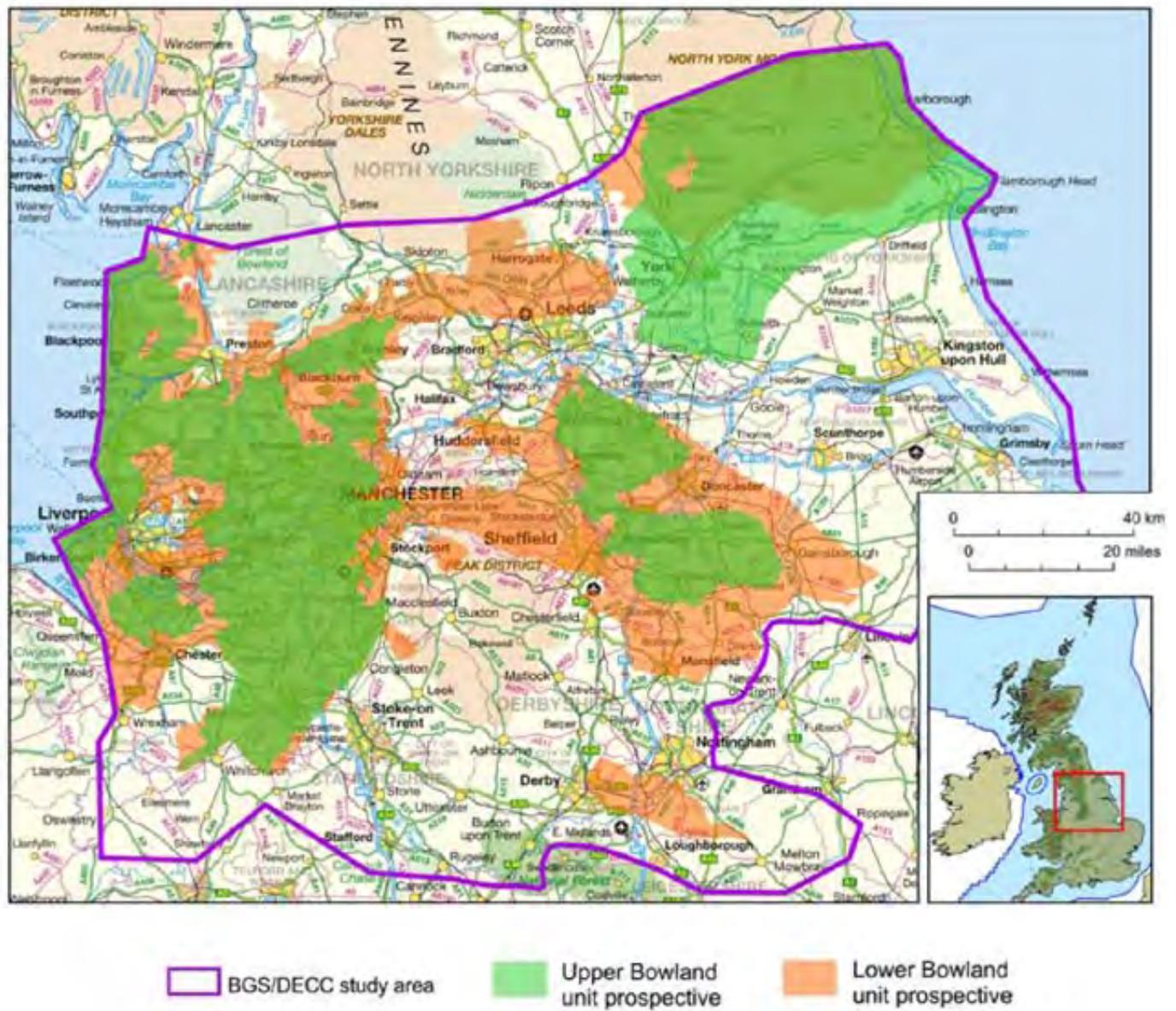
in the Yorkshire–Nottinghamshire coalfield?’

101 British Geological Survey and DECC report: The Carboniferous Bowland Shale Gas Study, Geology and Resource Estimation, 2013.

**8.2.12** Gas can also be obtained from shale deposits and research by the British Geological Survey<sup>101</sup> has identified substantial resources within the Bowland-Hodder shale deposits. This area extends from Lancaster in the north-west, across to Scarborough in the north-east. The broadly rectangular area extends as far south as Derby and Loughborough and therefore covers a large part of the County. Seismic surveys have been undertaken within the north east of the County. To date only one site at Bramley Moor has been granted planning permission, in 2018, for the exploration of shale gas. This permission expired in August 2021. The location of potential hydrocarbon resources from shale gas is shown on Figure 8.2.4.

102 Figure 44, The Carboniferous Bowland Shale gas study: geology and resource estimation, BGS, DECC, 2013

FIGURE 8.2.4: SUMMARY OF AREAS PROSPECTIVE FOR GAS IN THE UPPER AND LOWER PARTS BOWLAND-HODDER UNIT IN RELATION TO THE URBAN AREAS OF CENTRAL BRITAIN, 2013<sup>102</sup>



103 National Planning Policy Framework July 2021, Paragraph 215

## NATIONAL POLICY

### National Planning Policy Framework (NPPF)

8.2.13 Government policy and guidance relating to the extraction of all forms of hydrocarbons has developed rapidly in response to the discovery of new resources, such as shale gas, the emergence of new techniques for working those resources and the impact of those technologies. The NPPF<sup>103</sup> identifies oil and gas (both conventional and unconventional hydrocarbons) as important minerals and requires MPAs to plan for their steady and adequate supply. The relevant paragraphs relating specifically to the exploration and extraction of hydrocarbons, set out in the NPPF, are as follows. 'MPAs should:

- a) *when planning for onshore oil and gas development, clearly distinguish between, and plan positively for, the three phases of development (exploration, appraisal and production), whilst ensuring appropriate monitoring and site restoration is provided for;*
- b) *encourage underground gas and carbon storage and associated infrastructure if local geological circumstances indicate its feasibility; and*
- c) *encourage the capture and use of methane from coal mines in active and abandoned coalfield areas.'*

8.2.14 When determining planning applications the NPPF<sup>104</sup> states that '*Mineral Planning Authorities should ensure that the integrity and safety of underground storage facilities are appropriate, taking into account the maintenance of gas pressure, prevention of leakage of gas and the avoidance of pollution.*'

### National Energy and Climate Change Policy

8.2.15 An important consideration relating to the supply of energy minerals is the Government's Energy Policy which has evolved to put net zero and the efforts to fight climate change at its core. The Climate Change Act in 2008 set the UK's legally binding 2050 target to reduce greenhouse gas emissions by at least 80% relative to 1990 levels. The Target Amendment Order of 2019 has seen the percentage increased to 100%.

104 National Planning Policy Framework July 2021, Paragraph 216

105 DBEIS Energy White Paper Powering our Net Zero Future December 2020

8.2.16 In December 2020 the Government published its energy white paper<sup>105</sup> entitled *Powering our Net Zero Future*; in terms of the way in which we produce and use energy it promotes a decisive shift away from fossil fuels, as far as it is possible to do so, to using clean energy technologies such as renewables, nuclear and hydrogen. Nevertheless, the paper anticipates that oil and gas will still form part of the energy mix in 2050 and therefore it is important to plan for their continued supply. A Government Written Ministerial Statement (WMS)<sup>106</sup> published in November 2019 stated, *“the Government continues to recognise the importance of natural gas as a source of secure and affordable energy as we aim to reach net zero emissions by 2050”*. The Statement sets out that the Committee on Climate Change (CCC) predicts that we will still be consuming about 70% of the gas that we consume today in 2050 under our net zero target as significant reductions across building, industry and power are offset by demand for gas to produce hydrogen and therefore, continued good access to natural gas from both domestic and international markets is seen as critical.

## Shale Gas

8.2.17 In relation to shale gas the WMS states, *“The Government has always been clear that it will take a precautionary approach and only support shale gas exploration if it can be done in a safe and sustainable way, and that we will be led by the science on whether this is indeed possible. It remains our policy to minimise disturbance to those living and working nearby, and to prevent the risk of any damage”*. It explains that safety regulations in relation to seismic activity has led to the development of a ‘traffic light system’ which requires hydraulic fracturing to be suspended in the event of specified levels of activity. It adds that following seismic events at Cuadrilla’s Preston New Road site, Lancashire in 2018 and 2019 hydraulic fracturing has been suspended at the site and notes that further research is required to investigate the high levels of induced seismicity.

8.2.18 The WMS concludes that *“On the basis of the current scientific evidence, the Government has confirmed that it will take a presumption against issuing any further Hydraulic Fracturing Consents. This position, an effective moratorium, will be maintained until compelling new evidence is provided which addresses the concerns around the prediction and management of induced seismicity. While future applications for Hydraulic Fracturing Consent will be considered on their own merits by the Secretary of State, in accordance with the law, the shale gas industry should take the Government’s position into account when considering new developments.”*

106 DBEIS WMS HCWS68 Energy Policy Update November 2019

107 Atkins on behalf of DECC: Underground Coal Gasification – Evidence Statement of Global Warming Potential (2015)

## Underground Coal Gasification

- 8.2.19 In 2015, BEIS commissioned a report<sup>107</sup> to provide it with evidence on the global warming potential that the production and use of syngas from UCG would have, based on the likely end uses of the syngas in comparison to conventional processes and sources of power generation, for heating and chemical feedstocks. Amongst other things, the report found that in terms of power generation, UCG syngas would result in significantly greater GHG emissions than the natural gas fed equivalent in a combined feed power station. The use of CCS was not found to significantly reduce the level of GHG emissions.
- 8.2.20 In response to a written parliamentary question, in 2016 the then Secretary of State for Environment, Food and Rural Affairs provided a written parliamentary answer (WPA)<sup>108</sup> which stated: *'The Government has made a firm commitment to reducing the UK's carbon emissions, and our recent ratification of the historic Paris Agreement shows we are serious about global action on climate change. The Department for Business, Energy & Industrial Strategy (BEIS) commissioned a report from Atkins into the greenhouse gas implications of underground coal gasification to inform Government policy about its development in the UK. The report was peer reviewed by academics and industry. It finds that emissions from underground coal gasification would be too high to be consistent with our commitment to a low-carbon future. The Government is therefore minded not to support the development of this technology in the UK.'*

## Planning Practice Guidance

- 8.2.21 Where MPAs lie within a Petroleum Licence area, they are expected to include Petroleum Licence Areas on their policies maps and include criteria based policies for each phase; that is exploration, appraisal and production, setting clear guidance for the location and assessment of hydrocarbon extraction within those areas. PPG states that, *'above ground separation distances are acceptable 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 site and the adjacent development.'* MPAs may identify specific sites for hydrocarbon extraction through the site allocation process should the oil and gas industry wish to promote specific sites. In contrast to the practice established for other minerals resources, the guidance does not advocate the creation of formal safeguarding areas for hydrocarbons due to the depth of those reserves, the ability to use drilling equipment and the small surface area required for the installations.

108 UK parliament written questions, answers and statements Coal Gasification question for DEFRA UIN 56962 tabled on 12 December 2016

109 The provisions of the Town and Country Planning (General Permitted Development) (England) (Amendment) Order 2016 amends the

8.2.22 With regard to the determination of development proposals, MPAs are advised to assess applications for each phase on their respective merits and applications for the exploratory stage of development should not involve the consideration of the potential impacts of extraction. MPAs should take account of Government energy policy, which indicates a preference for energy supplies to be obtained from a variety of sources, including onshore oil and gas. MPAs should use appropriate conditions, having regard to the issues for which they are responsible, to mitigate against any adverse environmental impact.

## THE REGULATORY SYSTEM

8.2.23 In addition to obtaining planning permission the exploration, appraisal and production of hydrocarbons requires a number of approvals to be obtained from the appropriate regulatory bodies. Key bodies include:

### Oil and Gas Authority (OGA)

8.2.24 The OGA regulates the licensing of exploration and development of England's onshore oil and gas resources. The OGA issues well consents, development programme approvals, completion of work programme approvals and production consents. If hydraulic fracturing is proposed the OGA will require that a hydraulic fracturing plan (HFP) is submitted setting out how the operator will control and monitor the fracturing process and address the risk of induced seismicity.

8.2.25 The Petroleum Act 1998 vests all rights to the nation's petroleum resources in the Crown, but the OGA can grant licenses that confer exclusive rights to 'search and bore and get' petroleum. Whilst a licence holder is obliged to maximise recovery from the licence area, the award of a licence does not confer exemption from other legal and regulatory requirements, including the need to obtain planning permission. Current licence areas within the Plan area are included on Figure 8.2.5. A number of PEDL straddle mineral authority boundaries, liaison under Duty to Co-operate enables any cross-boundary impacts to be taken into account and monitored.

### Environment Agency (EA)

8.2.26 The EA ensures that hydrocarbon operations are conducted in a way that protects people and the environment. The Environment Agency's environmental permitting regulations cover: protecting water resources (including groundwater aquifers) as well as assessing and approving the use of any chemicals which form part of the hydraulic fracturing fluid; ensuring appropriate treatment and disposal of mining waste produced during borehole drilling and hydraulic fracturing including waste water; ensure suitable treatment and management of any naturally occurring radioactive materials (NORM) and the disposal of waste gases.

## Health and Safety Executive (HSE)

8.2.27 The HSE regulates the safety aspects of all phases of extraction, in particular responsibility for ensuring the appropriate design and construction and upkeep of a well casing for any borehole.

## Department of Business, Energy and Industrial Strategy (DBEIS)

8.2.28 Where 'associated hydraulic fracturing' is involved the DBEIS issues a Hydraulic Fracturing Consent as a final check that all requirements have been met to enable the development to commence.

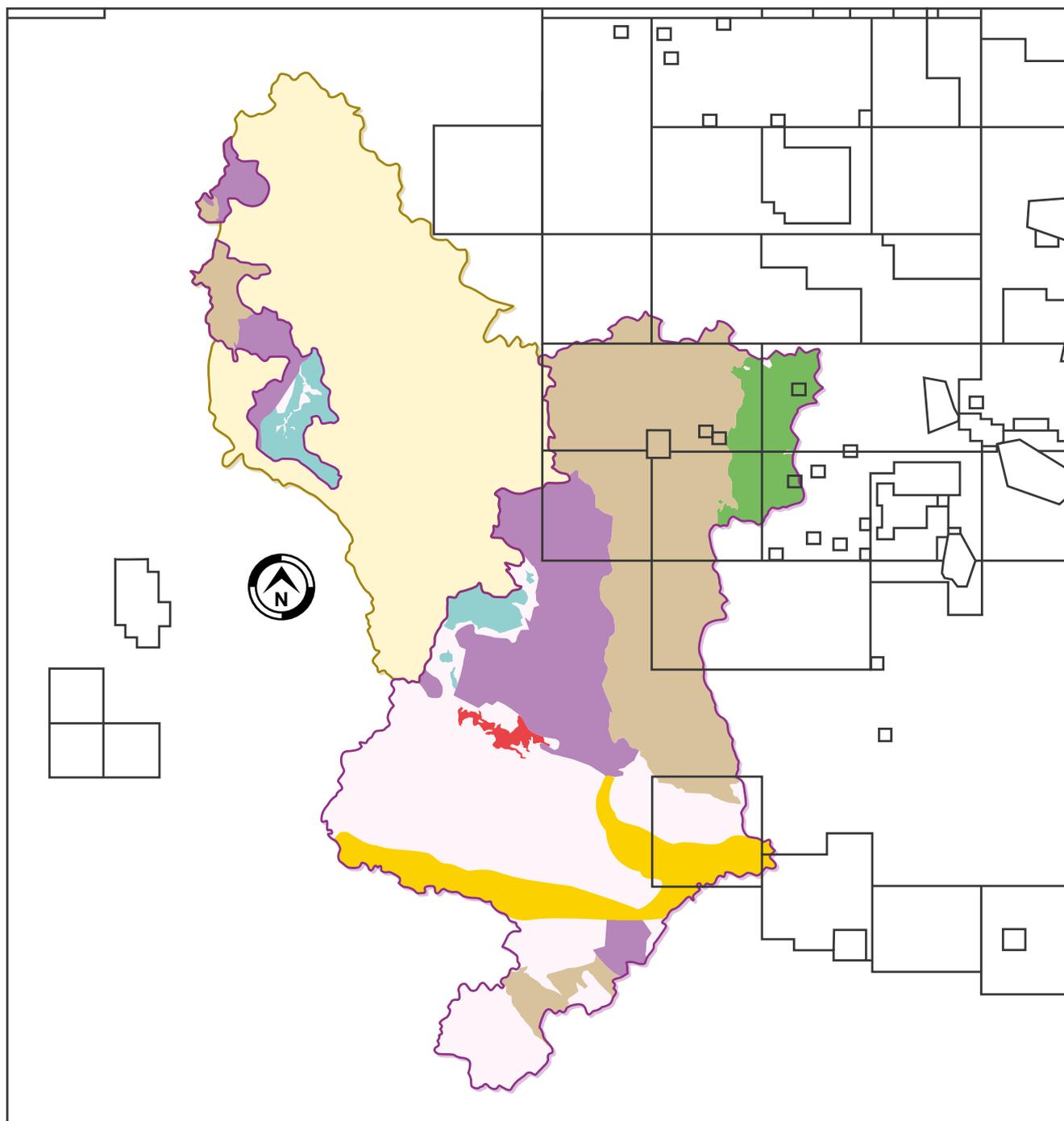
## The Coal Authority

8.2.29 The Coal Authority is responsible for issuing licences for access to coal for CBM extraction and UCG. The Authority is also responsible for issuing licences should drilling go through a coal seam.

8.2.30 Other bodies which may be involved in the consenting of the process include:

- Natural England, who may need to issue European Protected Species Licences in certain circumstances
- the British Geological Survey, who need to be notified by licensees of their intention to undertake drilling and, upon completion of drilling, must also receive drilling records and cores, and
- Hazardous Substances Authorities, who may need to provide hazardous substances consents.

FIGURE 8.2.5: PETROLEUM EXPLORATION AND DEVELOPMENT LICENCES 2019



- |   |                         |   |   |
|---|-------------------------|---|---|
|  | Plan Area               |  | Coal Measures (sandstones, mudstones and fireclay)    |
|  | Sand and Gravel         |  | Sherwood Sandstones                                   |
|  | Carboniferous Limestone |  | Millstone Grit (sandstones, mudstones)                |
|  | Permian Limestone       |  | Area of Peak District National Park within Derbyshire |
|  | Oil and Gas Licenses    |   |   |

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## NEED

**8.2.31** Modern society and the benefits it enjoys are highly dependent on the continued supply of energy, and whilst the Government seeks to transform energy supply to be derived principally from non-fossil fuel clean technologies, the continued supply of oil and gas will still be required during this transition. Given the volatility of the price of energy and the uncertainty about continued availability, especially imported energy supplies, the need to be more self-sufficient is an important requirement and this is reflected in national energy and mineral planning policy, as referred to above. The Government has given its support, in principle, to the onshore oil and gas industry, including the further exploitation of conventional sources and the promotion of oil and gas from unconventional sources such as shale gas. Subsequently, in 2016 the Government has stated that it was not minded to support the development of UCG technology and, from November 2019, it imposed a moratorium on issuing Hydraulic Fracturing Consents. However, no changes have been made to national planning policy for hydrocarbon development to reflect these statements.

**8.2.32** There are no national assessments of need for hydrocarbons, Government guidance is that the volume and mix of energy mineral extraction is a matter for the relevant industries and markets to determine. It is known that limestone and sandstone are sources of conventional oil and gas present in the Plan area. Coal deposits are known to contain unconventional oil and gas resources and recent studies demonstrate that shale bearing gas is present in parts of the Plan area. The scale of all resources available in the Plan area and the commercial viability of those resources are very uncertain and appear to be limited in some cases. However, it is possible that the oil and gas industry will seek to examine and extract these resources, if commercial viability is proven, and the Plan therefore needs to include policies to enable such development.

## SUPPLY

**8.2.33** In view of the lack of knowledge about the location and scale of economically viable oil and gas resources the Plan will maintain their supply by adopting a plan wide policy approach which allows for their exploration, appraisal and production subject to meeting a detailed set of criteria. The NPPF requires the MPA to clearly distinguish and plan for the three phases of development.

## SUMMARY OF THE KEY PHASES OF HYDROCARBON DEVELOPMENT

**8.2.34** The three phases of all hydrocarbon extraction operations; exploration, appraisal and production all require planning permission, although some initial preparatory work may have deemed planning consent.<sup>109</sup>

Town and Country Planning (General Permitted Development) (England) Order 2015 (“the General Permitted Development Order”) to introduce new permitted development rights allowing the drilling of boreholes for the purposes of carrying out groundwater monitoring; carrying out seismic monitoring, or locating and appraising the condition of mines, which is preparatory to potential petroleum exploration.

110 As defined in the Infrastructure Act 2015 (1)“Associated hydraulic fracturing” means hydraulic fracturing of shale or strata encased in

## Exploration

**8.2.35** The exploratory phase seeks to acquire geological data to establish whether hydrocarbons are present. The main method of determining whether an area has potential traps for petroleum is seismic exploration. Geological data can also be obtained by exploratory drilling for which planning permission is required. For onshore situations, exploratory drilling is a short-term, but intensive activity. Typically, site construction drilling and site clearance (if no further development) will take between 12 to 25 weeks. For unconventional hydrocarbons, exploratory drilling may take longer if measures are required to stimulate the gas flow, such as hydraulic fracturing and in the case of coal bed methane the removal of water from the coal seam.

## Appraisal

**8.2.36** The appraisal phase takes place following exploration when the existence of oil or gas has been proved, but the operator needs further information about the extent of the deposit or its production characteristics to establish whether it can be economically exploited. This phase typically can last up to two years or longer; it can take several forms, including additional seismic work, longer-term flow tests, or the drilling of further wells. This may involve additional drilling at another site away from the exploration site or additional wells at the original exploration site. For unconventional hydrocarbons it is likely to involve further hydraulic fracturing or dewatering followed by flow testing to establish the size of the resource and its productive life.

## Production

**8.2.37** The production phase normally involves the drilling of a number of wells at one or more well pads. This may be well pads used at the sites at the exploratory and/or appraisal stages, or from one or more new well pads. Associated equipment such as pipelines, processing facilities and temporary storage tanks are also likely to be required. Production can be up to around 20 years. The production stage may involve the re-fracturing of wells and is likely to require the periodic maintenance of wells which may require the use of drilling equipment.

**8.2.38** Each phase is likely to include several distinct stages, with associated increases in activity and vehicle movements, including site establishment, delivery and removal of plant and equipment specific to that stage, drilling, and site disestablishment and restoration. However, developments requiring well stimulation may not have the same discrete phases; exploration and appraisal may take place as a single process using the same wells.

**8.2.39** It is important that individual planning applications are considered on their own merits and do not take account of any potential future phases for which permission has not yet been sought. Where planning permission is granted for exploration or appraisal it does not carry with it any presumption that production from those wells will be permitted. Additionally, following initial testing not all exploration will necessarily lead to appraisal, and not all appraisal will lead to production.

## ENVIRONMENTAL AND SOCIAL IMPACTS

8.2.40 There are a range of environmental, local amenity and health impacts that are likely to be relevant when assessing planning proposals for hydrocarbon development including landscape and visual impacts, impacts from noise, vibration, traffic, lighting, emissions/air quality and impacts on the natural and historic environment. Many of these impacts are ones which would be common to most other mineral developments and therefore their impacts will be assessed under the Development Management Policies at Chapter 11 of the Plan. The hydrocarbon policy below SP17 covers only those matters that specifically relate to the extraction of hydrocarbons.

## CUMULATIVE IMPACTS

8.2.41 The majority of the areas that have potential for the presence of hydrocarbon resources lie on the exposed and concealed coalfield areas of Derbyshire. Within these areas widespread opencast and deep coal mining has taken place in the past and whilst all the mines and opencast sites have now closed, much of the legacy remains despite the progression of comprehensive remediation, restoration and redevelopment. The commercial production of hydrocarbons, particularly unconventional hydrocarbons may lead to the intensive development of the resource area over time as more well pads are developed, more wells are drilled, existing wells re-fractured and other supporting infrastructure built. Such development may lead to cumulative impacts on the environment and local amenity; these impacts will be assessed under the Development Management Policy DM14.

## HYDRAULIC FRACTURING

8.2.42 Specific impacts are raised where hydraulic fracturing is planned which may include pollution of ground and surface water, use of water resources, management of waste water and Normally Occurring Radioactive Material (NORM), air pollution, seismicity and impacts on geological features, and impacts on health. Many of these impacts are the responsibility of other regulatory bodies as set out at paragraphs 8.2.23 to 8.2.30. National planning guidance is clear that MPAs should not seek to duplicate these controls and should assume that other regulatory regimes will operate effectively. However, before granting planning permission the MPA will need to be satisfied that these issues can or will be adequately addressed by taking advice from the relevant regulatory body. Where such matters also give rise to land use implications the MPA will seek to address them through the Development Management Policies of the plan at Chapter 11.

## PROTECTED AREAS

**8.2.43** There are restrictions on associated<sup>110</sup> and relevant<sup>111</sup> hydraulic fracturing in protected areas, contained in national legislation and implemented through the PEDL and hydraulic fracturing consent regimes. The Infrastructure Act 2015 and secondary legislation<sup>112</sup> restrict associated and relevant hydraulic fracturing to a set distance (1,200 metres) below the surface, and below protected areas (Groundwater source protection areas, National Parks, AONBs and World Heritage Sites)<sup>113</sup> and prevent surface development in those protected areas together with SSSIs, Ramsar sites and European sites (as defined by regulation 8(1) of the Conservation of Habitats and Species Regulations 2017, including Natura 2000 sites protected under the Habitats Directive) and sites protected under the Wild Birds Directive. These designated areas benefit from strong national planning policy protection in their own right and, some cases, protective European and other legislation, not just from hydraulic fracturing but from hydrocarbon and other mineral development. Any impacts on them will be considered under the Development Management Policies set out at Chapter 11 including impacts on their wider settings or zones of influence/risk.

## COAL MINE METHANE

**8.2.44** The NPPF requires MPAs to encourage the capture and use of methane from coal mines in active and abandoned coalfield areas. The removal of methane from active and former coal mine workings can be beneficial for a variety of reasons. Methane leaking from active or abandoned mine workings can result in serious risk from explosions or other health risks. In such cases it is necessary to vent the gas in a controlled manner. Methane is also an important greenhouse gas which has significant global warming potential. Reducing methane emissions can therefore have significant climate change benefits.

**8.2.45** Unlike other forms of hydrocarbon extraction, the removal of methane from active or abandoned coal mines can be a relatively simple process that, once preparatory and construction works are complete, is unlikely to generate significant volumes of traffic or other activity. Such operations typically involve the collection (via suction) and transfer of the gas to a generating engine, located at the surface, which then burns gas to produce electricity. Generating equipment can also be relatively compact and small scale compared to other forms of hydrocarbon development.

shale which—(a)is carried out in connection with the use of the relevant well to search or bore for or get petroleum, and (b)involves, or is expected to involve, the injection of—(i)more than 1,000 cubic metres of fluid at each stage, or expected stage, of the hydraulic fracturing, or(ii)more than 10,000 cubic metres of fluid in total.

111 As defined in the Petroleum Licensing (Exploration and Production) (Landward Areas) (Amendment) (England and Wales) Regulations 2016 “Relevant Hydraulic Fracturing” means hydraulic fracturing of shale or strata encased in shale which is carried out in connection with the use of a Well to search or bore for or get petroleum, and involves, or is expected to involve, the injection of—more than 1,000 cubic metres of fluid at any stage, or expected stage, of the hydraulic fracturing, or more than 10,000 cubic metres of fluid in total.”

112 The Onshore Hydraulic Fracturing (Protected Areas) Regulations 2016 and the Petroleum Licensing (Exploration and Production) (Landward Areas) (Amendment) (England and Wales) Regulations 2016

113 As defined in the Onshore Hydraulic Fracturing (Protected Areas) Regulations 2016

114 National Planning Policy Framework Paragraph 209, July 2021

**8.2.46 Proposals for the exploration and/or appraisal of onshore conventional and unconventional oil and gas will be supported where they:**

- 1) identify the extent of the target reservoir and the extent of the area of search within the target reservoir is provided (informed by the exploration stage results where the proposal is for appraisal);**
- 2) ensure that well sites and associated infrastructure are sited in the least sensitive location from which the target reservoir can be accessed;**
- 3) demonstrate that there will be no unacceptable adverse impact on the integrity of the underlying geological structure; including disturbance to features such as shafts and seams associated with former coal mining or other mining activity and that measures are included to avoid induced seismicity;**
- 4) ensure that operations are for an agreed, temporary length of time;**
- 5) ensure that well sites and associated infrastructure are restored at the earliest practicable opportunity whether or not oil or gas is found.**

**8.2.47 Proposals for the production of onshore conventional and unconventional oil and gas will be supported where:**

- 6) They satisfy criteria 2 - 5 above; and**
- 7) A full appraisal programme for the oil and gas field is provided;**
- 8) A framework for the full and timely development of the oil and gas field is provided including an indication as to how the proposal fits within the framework;**
- 9) The number of well sites and associated infrastructure required for hydrocarbon production sit within the agreed development framework, are justified in terms of their number and extent and are progressively installed, wherever possible;**
- 10) The development includes the use of non-road modes of transport such as pipelines or rail for the transport of the oil or gas unless it can be demonstrated that this is not practicable or environmentally preferable.**

Continues on next page

**8.2.48 Where proposals include a novel approach or new techniques for oil and gas extraction,**

- 11) the MPA may require the provision of a financial restoration bond appropriate to the scale, nature and location of the development in order to ensure that the site is restored and left in a condition suitable for a beneficial after-use.**

## REASONED JUSTIFICATION

**8.2.49** Hydrocarbons are minerals of national and local importance and in accordance with the NPPF, the Plan is required to clearly distinguish between, and plan positively for, the three phases of development (exploration, appraisal and production), whilst ensuring appropriate monitoring and site restoration is provided for. Policy SP17 sets out the criteria against which all proposals for hydrocarbon development will be assessed and identifies those applicable to particular stages of development.

**8.2.50** Unlike quarrying the nature of extracting hydrocarbons, and particularly the directional drilling techniques available to operators, offers a degree of flexibility in terms of the location of surface development relative to the location of the mineral resource. This flexibility provides some opportunity to ensure from the outset that well sites are located in the least sensitive location. It will be for the operator to demonstrate that the chosen site location is the least sensitive location to access the mineral through the submission of appropriate evidence.

**8.2.51** In order to assess the 'least sensitive' location it is important at all of the three phases of development that an appropriate level of information is provided about the target formation/reservoir and the development of the wider oil and gas field. At the production stage particularly, it is important to establish such information in order to ensure that a strategic approach is taken to the development of the area, which includes directing development, as far as practicable, towards the least sensitive locations.

**8.2.52** Impacts are likely to increase if commercial quantities are found and a site moves into production. This may involve the construction of more well pads and/or the drilling of more wells on an existing pad or the re-fracturing of existing wells. Associated equipment such as pipelines, processing facilities and temporary storage tanks are also likely to be required which in the case of proposals for UCG could have the potential to be quite significant in scale. It is important, therefore, that a framework for the comprehensive development of the oil and gas field area is provided to ensure that it is developed in an environmentally acceptable way. The framework should include justification for the number, location and time frame for the well sites. Associated processing, dispatch and transport facilities should be sited, designed and operated to minimise environmental and local amenity impacts.

- 8.2.53** The installation of drilling rigs and associated equipment can generate a significant number of heavy vehicle movements including some involving abnormal loads. It is important therefore to ensure that well sites are located where there is good access to suitable road networks. The use of non-road transport such as pipelines or rail to transport produced gas and large volumes of water required for hydraulic fracturing can reduce road transport movements and the proximity to/ environmental acceptability of providing, such infrastructure should be taken into account in the location of well sites.
- 8.2.54** Potential areas for hydrocarbon extraction lie in the eastern part of the County in the former coalfield areas which have been extensively mined for coal. In drilling for oil and gas and particularly if hydraulic fracturing is to take place it is important to establish geological faulting in an area and/or the location of past coal seams or other mining activity to protect the integrity of the geological structure and reduce the likelihood of induced seismicity particularly where hydraulic fracturing is proposed.
- 8.2.55** Hydrocarbon development can be relatively short term at the exploration and appraisal phases and up to 20 years in the case of production. Whatever the duration of the development it is important to ensure that well sites are decommissioned and that land is quickly restored to a beneficial after-use. Hydraulic fracturing, CBM and UCG are relatively new and untried techniques for exploiting hydrocarbons. PPG encourages the use of financial guarantees to cover restoration and aftercare costs only in exceptional circumstances, such circumstances include where a novel approach or technique is to be used which the MPA consider could include hydraulic fracturing, CBM and UCG. However, if an operator contributes to a mutual funding scheme then it should not be necessary for guarantees to be sought. The proposed draft policy allows for each case to be considered individually.

## CHAPTER 9: SAFEGUARDING

### 9.1 SAFEGUARDING MINERAL RESOURCES

- 9.1.1 Minerals are a non-renewable resource and can only be worked where they occur. The NPPF requires that all mineral planning authorities define Mineral Safeguarding Areas (MSAs) so that known locations of specific mineral resources of local and national importance are not sterilised by non-mineral development, such as housing, retail or industry. This will help to ensure that the minerals remain available for possible use by future generations. Where it is considered necessary for non-minerals development to take place, prior extraction of the mineral should be undertaken where practical and environmentally feasible.
- 9.1.2 Mineral Safeguarding Areas cover known deposits of minerals which are worthy of being safeguarded from sterilisation by non-mineral development. Mineral Consultation Areas identify the geographical areas based on a Mineral Safeguarding Area, where the district or borough council are required to consult the Mineral Planning Authority for any proposals for non-minerals development. The designation of MSAs does not convey any presumption that mineral extraction will be acceptable in these areas; nor do they preclude other development from being permitted; their purpose is to provide a policy tool to ensure that mineral resources are considered fully alongside all other considerations when they are at risk from being lost to proposals for non-mineral development and to ensure that they remain available for future assessment and possible future use. There is also no presumption against mineral extraction in areas that are not safeguarded, as MSAs may not necessarily capture every viable resource.

### NATIONAL POLICY

#### National Planning Policy Framework (NPPF)

- 9.1.3 The NPPF sets out the national approach to planning for minerals, including the need to conserve mineral resources in accordance with the principles of sustainable development. It requires MSAs to be defined in planning policy documents to ensure that known locations of specific minerals of local and national importance are not sterilised by non-mineral development, whilst not creating a presumption that resources which are defined will be worked. It sets out that, when it is considered necessary for non-mineral development to take place, prior extraction of the minerals should be encouraged where practical and environmentally feasible.

9.1.4 It states that other development proposals should not normally be permitted in MSAs if it might constrain potential future use for mineral working. Annex 2 of the NPPF sets out that minerals of local and national importance include brick clay (especially Etruria Marl and fireclay), silica sand (including high grade silica sands), coal derived fly ash in single use deposits, cement raw materials, gypsum, salt, fluorspar, shallow and deep-mined coal, oil and gas (including conventional and unconventional hydrocarbons), tungsten, kaolin, ball clay, potash, polyhalite and local minerals of importance to heritage assets and local distinctiveness. It encourages the prior extraction of minerals if it is necessary for non-mineral development to take place in MSAs. It also sets out that local planning authorities should safeguard:

- existing, planned and potential sites for the bulk transport, handling and processing of minerals; and
- the manufacture of concrete and other concrete products and the handling, processing and distribution of substitute, recycled and secondary aggregate material.

9.1.5 PPG sets out that mineral planning authorities should adopt a systematic approach for safeguarding mineral resources, which:

- uses the best available information on the location of all mineral resources in the authority area. This may include use of British Geological Survey maps as well as industry sources.
- consults with the minerals industry, other local authorities (especially district authorities in two-tier areas), local communities and other relevant interests to define MSAs
- sets out MSAs on the policies map that accompanies the local plan and define MCAs based on the MSAs, and
- adopts clear development management policies which set out how proposals for non-minerals 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.
- PPG requires District/Borough councils to include MSAs on their Local Plan Proposals Maps.

## SAFEGUARDED RESOURCES

9.1.6 For the purposes of safeguarding, the Plan area has the following mineral resources:

- Glaciofluvial sand and gravel.
- Carboniferous limestone (aggregate, industrial and building stone grades).
- Fluorspar (found within the carboniferous limestone).
- Permian limestone (industrial and aggregate grade).
- Surface mined coal.
- Namurian sandstone (building stone).
- Sherwood sandstone.
- Fireclay (found within the coal measures).
- Brick clay (associated with the coal measures).
- Coal derived fly ash (associated with glaciofluvial sand and gravel).

9.1.7 These resources will all be safeguarded. Fire Clay and Brick Clay are found within the surface coal resource and will be safeguarded by virtue of this predominant mineral being safeguarded. Coal derived fly ash has been used in the past to restore glaciofluvial sand and gravel workings and will be safeguarded by virtue of the glaciofluvial sand and gravel resource being safeguarded. Deep mined coal, oil and gas resources are not safeguarded because they are not vulnerable to sterilisation as a result of surface development. This is because although the material is extracted from a wide area underground, it is brought to the surface at a single relatively small point on the surface.

## EXEMPT DEVELOPMENTS

9.1.8 The main risks to future minerals extraction will arise from proposals to extend built up areas into the countryside and new development in the open countryside. Given that the majority of planning applications are submitted for development within urban areas, the designation of MSAs and MCAs could potentially lead to a large amount of unnecessary notification between district planning authorities and mineral planning authorities. To overcome this, a list of exempt developments is proposed. These are developments which will have no significant implications for mineral safeguarding and therefore on which the district/borough planning authority will not be required to consult the MPA. These are:

- Applications for minor householder development including extensions and conversions.
- Applications for alterations and extensions to existing buildings and for change of use of existing development, unless intensifying activity on site.
- Applications for advertisement consent.
- Applications for reserved matters, including subsequent applications after outline consent has been granted.
- Development which is in accordance with the District/Borough Local Plan which took account of mineral sterilisation and determined that prior extraction would not be practicable.
- Prior notifications (telecoms, forestry, agriculture, demolition).
- Applications for works to trees.
- Applications for temporary planning permission.
- Applications for Listed Building Consent

9.1.9 No specific thresholds are applied in terms of the area of the development site to be considered for consultation. Doing so may exclude small developments that can sterilise a large amount of mineral or a mineral of national importance.

## MINERAL CONSULTATION AREAS

9.1.10 Since Derbyshire is a two-tier area, there will also be a need to include Mineral Consultation Areas (MCAs). This is the geographical area covered by the safeguarded mineral resource. For this Plan, the safeguarding and consultation areas are identical. In areas covered by the consultation area, the District/Borough Planning Authorities will be required to consult the MPA on planning applications and local plan allocations that arise within this area.

## ASSESSMENT AND MITIGATION OF IMPACTS

- 9.1.11 Where new non-mineral development is proposed in close proximity to a minerals operation, it will be the responsibility of the developer of the proposed development to put in place any measures which will be required to mitigate any potential adverse impacts of the existing minerals operations.
- 9.1.12 It is expected that the individual or company proposing a development will provide the necessary information to enable the Mineral Planning Authority to consider the potential effect of non-exempt development in MSAs/MCAs on mineral safeguarding. This will take the form of a Minerals Resource Assessment and should include the following information:

- The type of mineral resource(s) thought to be present;
- the potential extent of sterilisation which could occur as a result of the development in terms of tonnage;
- Economic value and viability of the mineral, i.e. the market interest.
- Site specific considerations that may affect feasibility or acceptability of extraction from the site;
- Potential options for prior extraction including the amount that could be extracted, nearby operators that could extract and process the material, or opportunities for on-site use.

## PRIOR EXTRACTION

- 9.1.13 There will be cases where there is a clear and demonstrable need for non-mineral development to place within mineral safeguarding areas. In such cases, to prevent the unnecessary sterilisation of mineral resources, prior extraction of the mineral will be sought where practicable. It is likely to be an option for relatively shallow deposits (for example sand and gravel, building sand and shallow coal) rather than for hard rock.
- 9.1.14 The extraction of mineral prior to, or as part of the, development of a site may be of economic advantage due to the availability of mineral on site for the development proposed or the shorter distance to market if sold. There will be different issues regarding prior extraction depending on the mineral involved, but it is most likely to be viable for shallow resources such as sand and gravel and surface coal. In the case of coal, in particular, prior extraction can help to rectify issues associated with land stability.

9.1.15 It is acknowledged that there will be cases where prior extraction will not be viable or appropriate. In such cases, the developer will be expected to demonstrate that:

- The non-mineral development is of a minor nature as defined in the categories of exempt developments listed above or:
- The need for the non-mineral development can be demonstrated to outweigh the need to safeguard the mineral; or
- the mineral in the location concerned is no longer of any potential value as it does not represent an economically viable and therefore exploitable resource; or
- the non-mineral development would be on the urban fringe where mineral extraction would be inappropriate; or
- The non-mineral development is of a temporary nature that does not inhibit extraction within the timescale that the mineral is likely to be needed.

## POLICY SP18: MINERAL SAFEGUARDING AREAS AND CONSULTATION AREAS

**9.1.16 Locally and nationally important mineral resources will be safeguarded from sterilisation by non-minerals development through the designation of mineral safeguarding areas and mineral consultation areas, as identified on the Policies Map.**

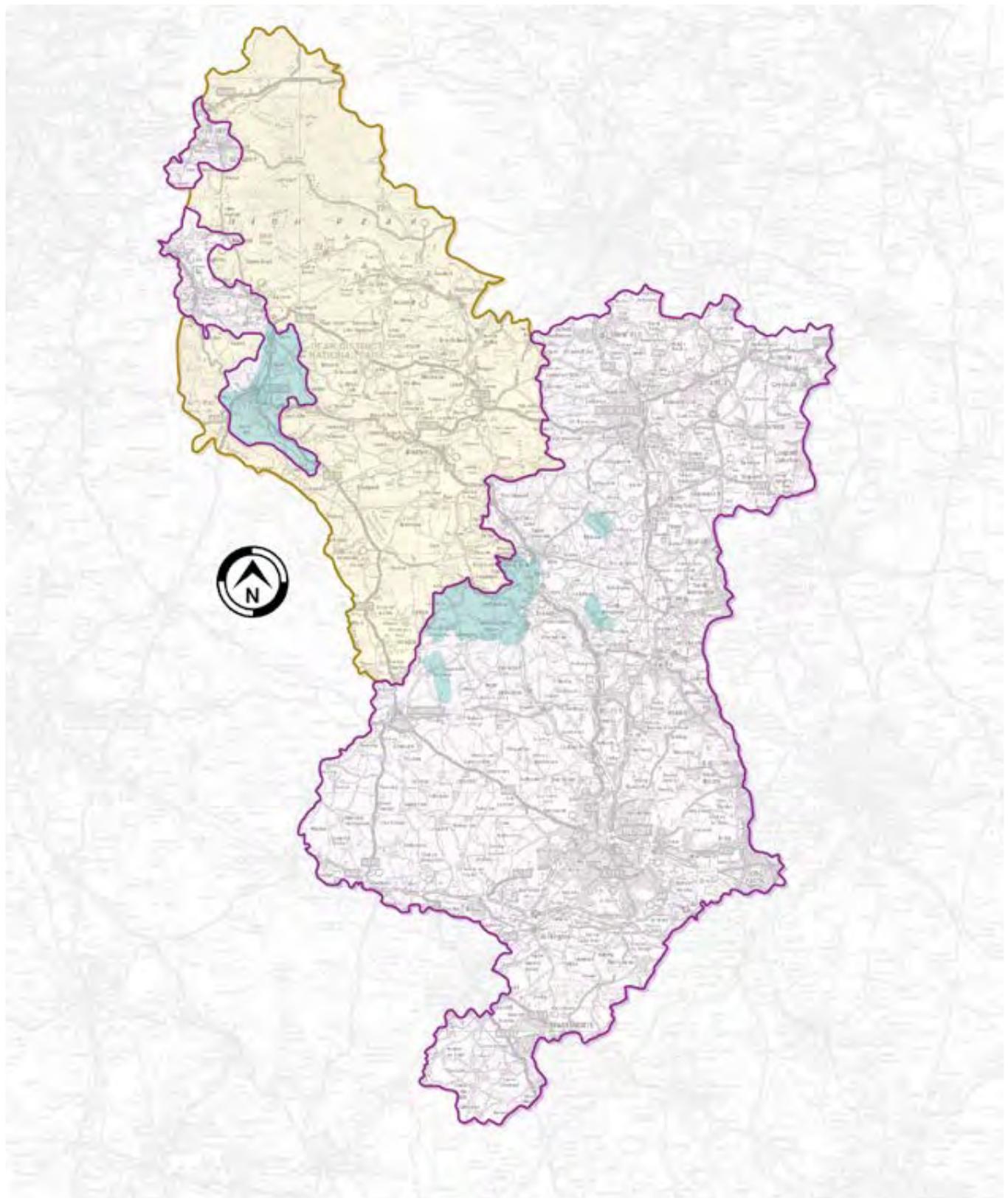
**Proposals for non-mineral development in mineral safeguarding areas will be required to demonstrate, through a mineral resource assessment, that the mineral resource would not be sterilised as a result of the development. Where this cannot be demonstrated, and where there is a clear and demonstrable need for the non-mineral development prior extraction of the mineral will be sought. In such cases, the mineral should be extracted prior to the development, where this can be achieved in practicable and economic terms without unacceptable impact on the environment or local communities and having regard to the benefits of the restoration of the site,**

**Applications for non-mineral development in Mineral Consultation Areas must include an assessment of the effect of the proposed development on the mineral resource.**

## REASONED JUSTIFICATION

- 9.1.17** The NPPF requires MSAs to be defined to identify the mineral resources which are worthy of safeguarding. MCAs identify the areas where the District and Borough authorities are required to consult the Mineral Planning Authority on non-mineral development. In this Plan, the safeguarding and consultation areas are identical and as such one map has been produced and is included on the Policies Map. The NPPF encourages the prior extraction of minerals where appropriate before alternative uses are permitted to help ensure that the valuable mineral is not lost as a result of the development.

FIGURE 9.1.1 CARBONIFEROUS LIMESTONE SAFEGUARDING AREA



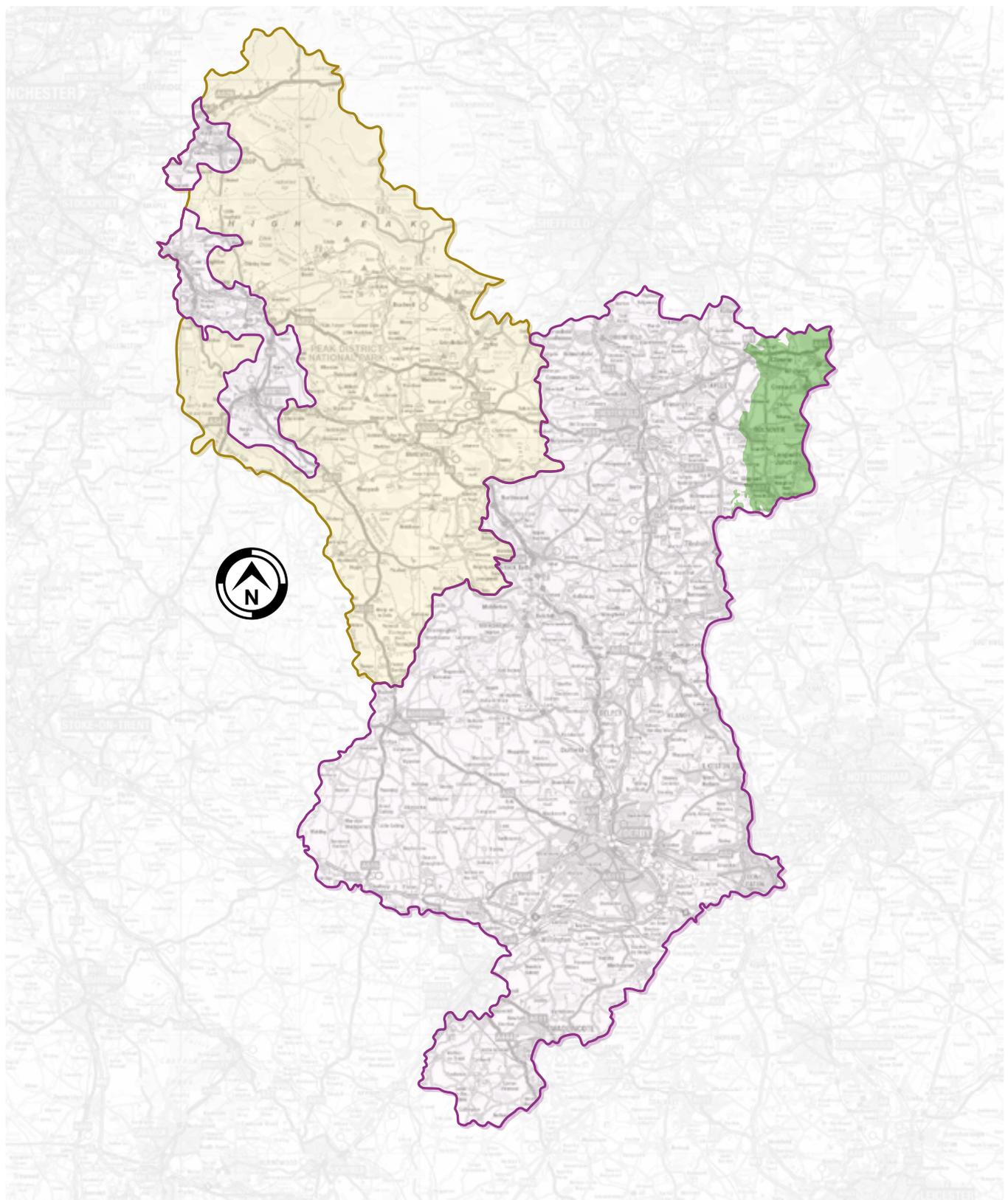
-  Plan Area
-  Peak District National Park Area
-  Carboniferous Limestone Safeguarding Area

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FIGURE 9.1.2 PERMIAN LIMESTONE SAFEGUARDING AREA



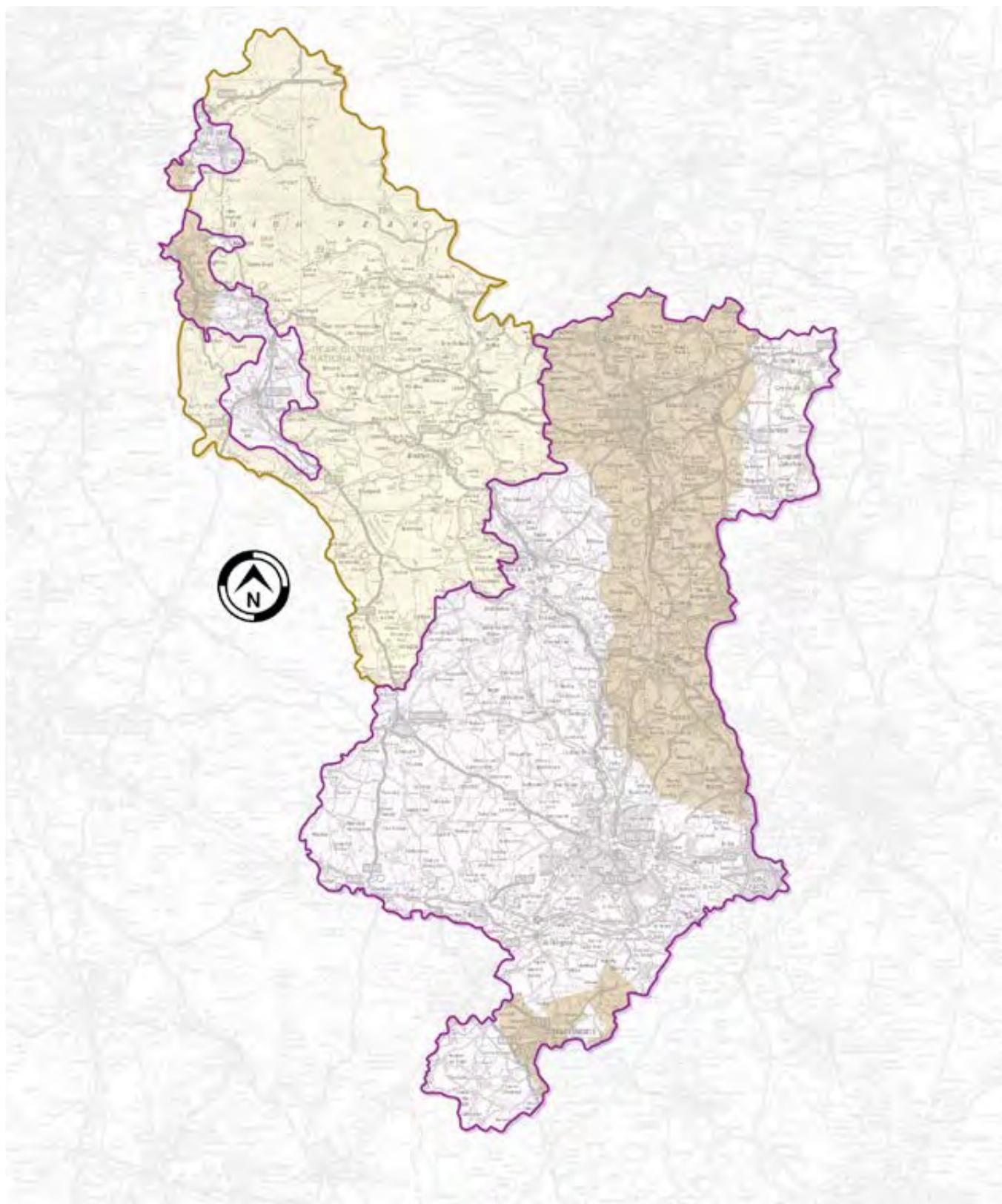
-  Plan Area
-  Peak District National Park Area
-  Permian Limestone Safeguarding Area

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FIGURE 9.1.3 SURFACE COAL SAFEGUARDING AREA



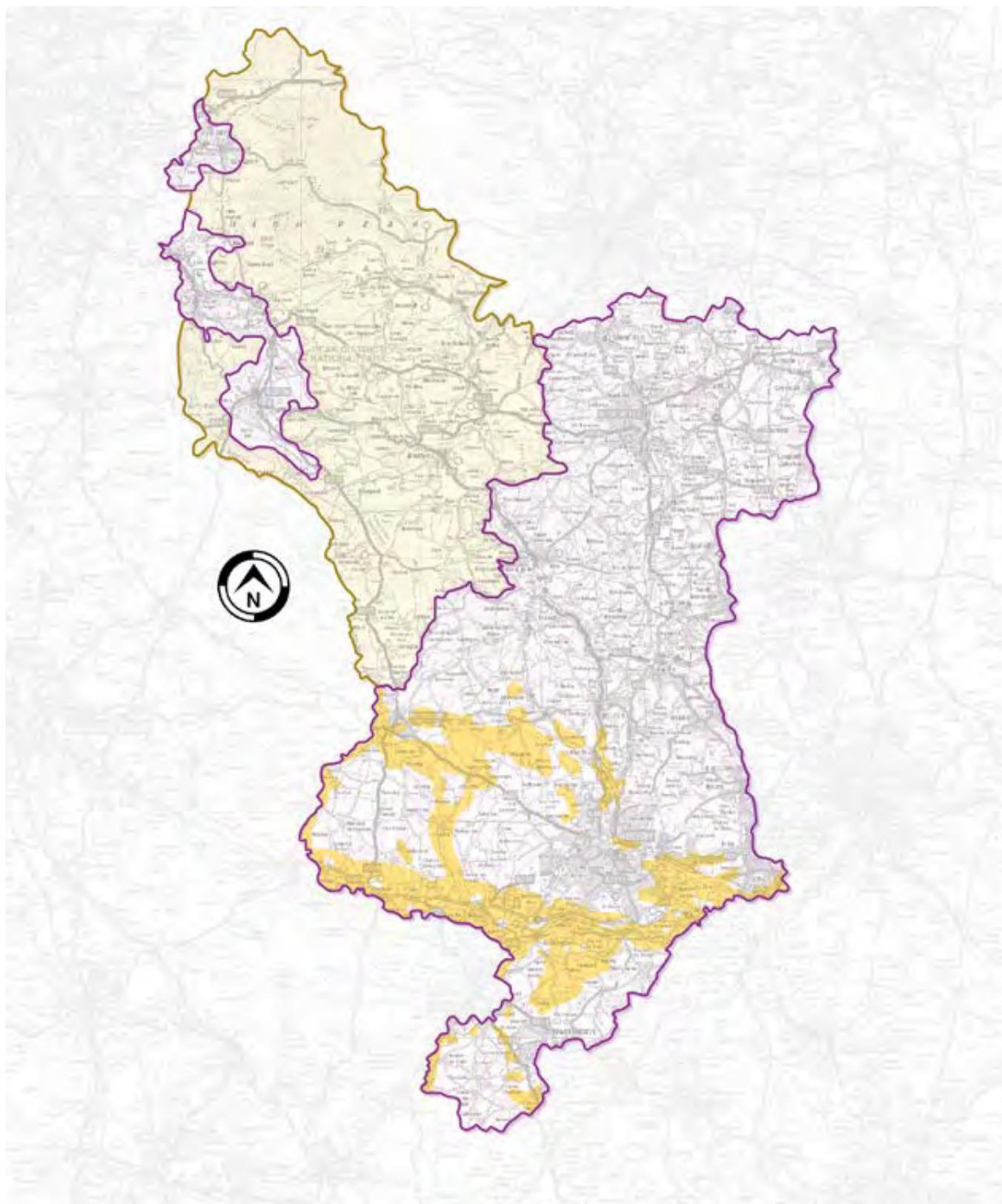
-  Plan Area
-  Peak District National Park Area
-  Surface Coal Safeguarding Area

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FIGURE 9.1.4 SAND AND GRAVEL SAFEGUARDING AREA



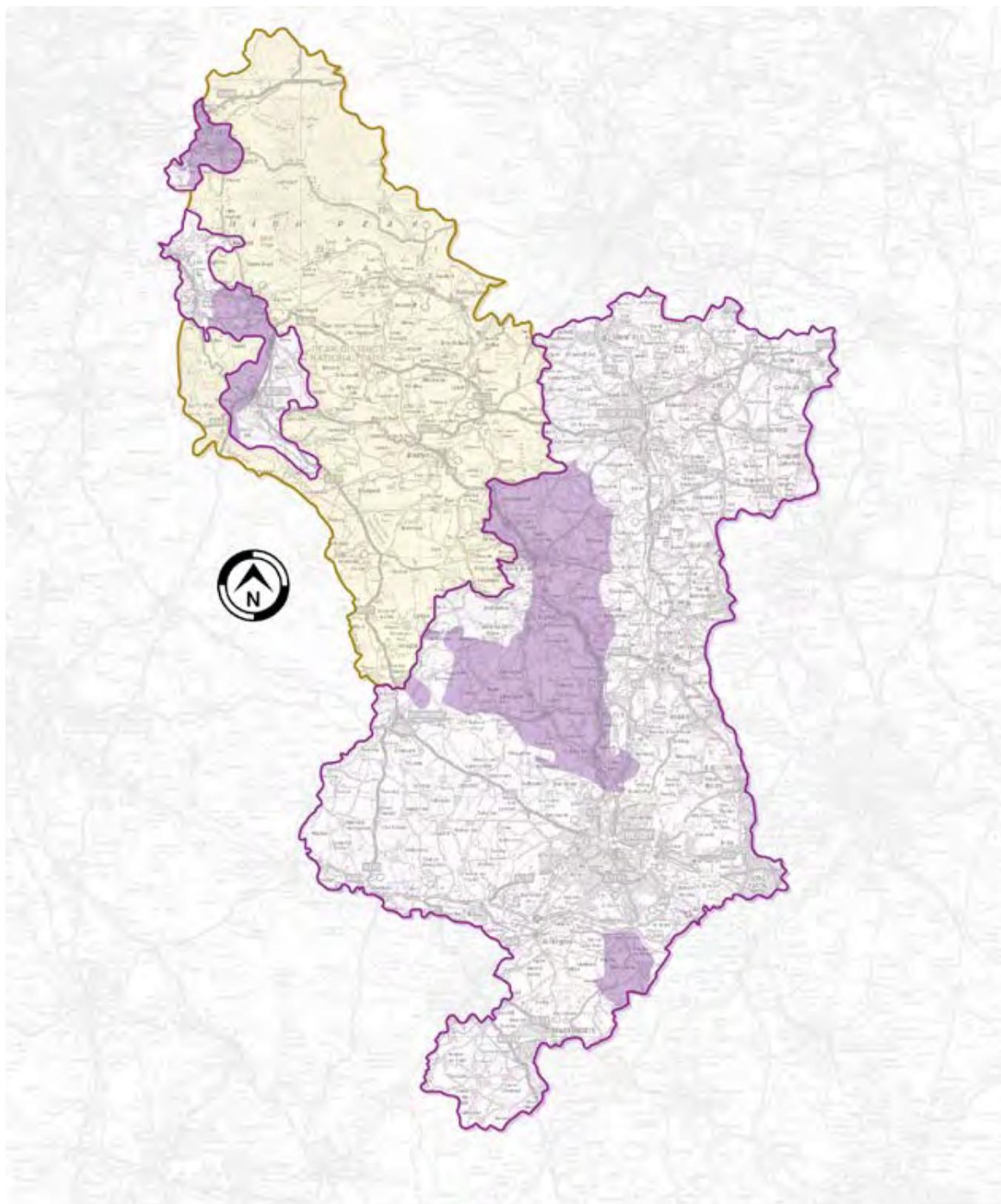
- Plan Area
- Peak District National Park Area
- Sand and Gravel Safeguarding Area

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FIGURE 9.1.5 EXTENT OF SANDSTONE / GRITSTONE RESOURCE



-  Plan Area
-  Peak District National Park Area
-  Sandstone/Gritstone Safeguarding Area

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## 9.2 SAFEGUARDING MINERALS RELATED INFRASTRUCTURE

9.2.1 This chapter considers how the minerals supply and transport infrastructure in the Plan area will be safeguarded. It is important to safeguard minerals related infrastructure to ensure that the minerals which are produced within the Plan area and the surrounding areas are supplied to the market in the form required (e.g. concrete or coated road stone), and the potential to transport them in sustainable ways is maintained, including by rail and water. Safeguarding will also ensure that if development is proposed at, or near to, any of the identified locations then the significance of the site in terms of retaining supply can be considered fully before decisions are made.

### NATIONAL POLICY

#### National Planning Policy Framework (NPPF)

9.2.2 The NPPF, sets out that, “It is essential that there is a sufficient supply of material to provide the 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 need to be made of them to secure their long-term conservation.”<sup>114</sup>

9.2.3 It also sets out that, “...local planning authorities should safeguard:

- existing, planned and potential sites for the bulk transport, handling and processing of minerals; and
- the manufacture of concrete and other concrete products and the handling, processing and distribution of substitute, recycled and secondary aggregate material.

9.2.4 As such, the safeguarding of minerals infrastructure is an issue that must be addressed in the Minerals Local Plan.

9.2.5 In terms of transport infrastructure, the NPPF states that, “planning policies should identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development.”

9.2.6 Planning Policy Guidance states that Mineral Planning Authorities should safeguard existing, planned and potential storage, handling and transport sites to:

- ensure that sites for these purposes are available should they be needed; and
- prevent sensitive or inappropriate development that would conflict with the use of sites identified for these purposes.

9.2.7 It sets out that in areas where there are county and district authorities, responsibility for safeguarding facilities and sites for the storage, handling and transport of minerals in local plans will rest largely with the district planning authority. Exceptions will be where such facilities and sites are located at quarries or aggregate wharves or rail terminals.

9.2.8 Planning authorities should consider the possibility of combining safeguarded sites for storage, handling and transport of minerals with those for processing and distribution of recycled and secondary aggregate. This will require close co-operation between planning authorities.

## TYPES OF MINERAL RELATED INFRASTRUCTURE

### Transport Infrastructure

9.2.9 There are currently three operational railheads, three non-operational railheads and four rail links to quarries in the plan area (see Appendix 9.2A for a list of the sites). These are already effectively safeguarded as a result of them being located within permitted mineral workings.

### Concrete Batching Plants

9.2.10 There are currently thirty five concrete batching plants in the Plan area. (See Appendix 9.2B for a list of the sites). Some facilities are located on existing mineral workings, whilst others are standalone facilities on industrial estates in urban areas. The numbers and distribution of the sites involved do not suggest that any individual plant is critical in its own right; each would appear to serve its own relatively limited local area.

9.2.11 It can be beneficial in sustainability terms where the batching plant is located within a quarry as the host operation often supplies a large proportion of the raw materials for the manufacture of concrete or asphalt, thereby reducing transportation. Other concrete plants are usually situated within industrial estates. Large development sites often build their own temporary concrete plants to supply the development.

## Coated Stone Plant (Asphalt)

- 9.2.12 Asphalt is a vital product as it is used in many different applications. These include road construction and maintenance, pavements, airport runways, school playgrounds, car parks, footpaths and cycleways and the roofing of buildings.
- 9.2.13 There are four coated stone plants in the Plan area. These are listed in Appendix 9.2B of the Minerals Infrastructure Background Paper. Two are within quarries and two are in industrial estates.

## Facilities Producing Secondary and Recycled Aggregate

- 9.2.14 The most common of these are the dedicated stand-alone transfer and recycling facilities where crushing and screening of appropriate wastes is undertaken on sites which receive, sort and process a range of high volume, low-value materials. Some of these sites focus entirely on this activity but most sites perform a range of other sorting and recycling operations in addition to aggregate production. During the last twenty years the number of dedicated recycling sites throughout the Plan area has increased significantly. The primary locations are in and around the main urban areas, focused on older industrial estates and other areas of previously developed land at the lower value end of the market. Most of these facilities are relatively small-scale operations. They are listed at Appendix 9.2C.
- 9.2.15 The other source of recycled aggregate is from demolition sites where mobile crushing and screening equipment has been used to produce aggregates from the buildings and other site materials which are being removed and used in the reconstruction works at the site. Detailed information about the number of sites where this has taken place and the volume of material produced is very difficult to obtain.
- 9.2.16 Secondary aggregates have also been produced from materials obtained from the reworking of old, former tips associated with heavy industrial businesses. Some materials have been derived from sites where the primary activity has been to obtain more valuable materials (e.g. red shale or coal) contained in tips and which are now in demand and can be worked in an economically viable manner. Other materials have been obtained from tips which have been removed as part of wider remediation projects.

## POLICY SP19: SAFEGUARDING MINERALS RELATED INFRASTRUCTURE

**9.2.17 Existing, planned and potential rail heads, rail links to quarries, sites for concrete batching and processing and distribution of recycled and secondary aggregate within quarries are safeguarded to ensure that they are taken into account when other forms of development are planned in or around the facility.**

**Should the facility be removed during the course of the Plan period or it can be proved that is no longer required, this will be taken into account when considering a proposal on or in the vicinity of the facility**

### REASONED JUSTIFICATION

- 9.2.18** Facilities which are located within permitted mineral workings, and therefore within the control of the County Council, will be safeguarded in accordance with Policy SP24. It is not necessary to add another layer of safeguarding as these forms of development already have a sufficient level of protection both from being located within an active mineral working.
- 9.2.19** However, stand-alone facilities permitted by a District or Borough Council, and which are not specifically linked to the existing minerals workings, should be safeguarded by the relevant District or Borough Council in line with national policy and guidance.
- 9.2.20** Most District and Borough Council Local Plans contain policies designed to protect existing employment land and these types of facilities would also be safeguarded by the 'agent of change' principle as set out in the NPPF. This states that existing businesses and facilities should not have unreasonable restrictions placed on them by new development permitted after they were established and that the applicant (or 'agent of change') should be required to provide suitable mitigation before the development is completed.
- 9.2.21** All the relevant local authorities have been involved in developing an approach to mineral infrastructure safeguarding, and this will continue throughout the remaining stages of Plan preparation and its implementation in the future. Safeguarding will ensure that the MPA is consulted by the District/Borough planning authority on any development which may affect minerals related infrastructure and that it is therefore taken into account in the consideration of the planning application. Once the policies and procedures for consultation are in place, they will be monitored and reviewed to ensure they are working effectively and remain relevant.

- 9.2.22 Where new non-mineral development is proposed in close proximity to a minerals operation, it will be the responsibility of the developer of the proposed development to put in place any measures which will be required to mitigate any potential adverse impacts of the existing minerals operations.
- 9.2.23 Safeguarding a facility which is currently in operation cannot guarantee that it will remain in operation until the end of the Plan period and beyond. It may be the case that a particular site is no longer required for valid reasons, for example a new supply source may have been developed elsewhere, the company may be consolidating or relocating or the specific project being worked on has ended and the infrastructure is no longer required. In such cases, it would not be appropriate to prevent alternative, productive forms of development from using the site, as this may stifle future economic growth.
- 9.2.24 It is also possible that other forms of development could be allowed if it can be shown that the loss of the particular infrastructure site would not affect the provision of the resource to which it relates in overall terms or would be replaced elsewhere or there is shown to be sufficient provision of that particular type of facility in the area that it serves. This ensures that safeguarding can be maintained but will allow for the importance and role of the facility to be considered at the planning application stage, taking account of the potential contribution of alternative types of development.

## APPENDIX 9.2A: RAILHEADS AND RAIL LINKS IN THE PLAN AREA

Please note, the list of developments in this category is at an early stage of collation and requires input from a number of different organisations.

Infrastructure Type	Location	Operational?	Comment
Railhead	Tunstead Quarry	Yes	
Railhead	Dowlow Quarry	Yes	
Railhead	Doveholes Quarry	Yes	
Railhead	Hillhead Quarry	No	
Railhead	Whitwell Quarry	No	
Railhead	Hindlow Quarry	No	Active for imports from Tunstead Quarry only
Rail Link	To Former Oxcroft Disposal Point	No	Rail lines removed. Future reopening depends on viability
Rail Link	Whitwell Quarry	No	
Rail Link	Buxton to Dowlow Quarry	Yes	
Rail Link	Buxton to Chapel-en-le-Frith via Tunstead and Dove Holes Quarries	Yes	

## APPENDIX 9.2B: OTHER MINERALS RELATED INFRASTRUCTURE IN THE PLAN AREA

HIGH PEAK				
Infrastructure Type	Location	Currently Operational?	Part Of Existing Mineral Site?	Comment
Ready Mixed Concrete	Peak Works, Eldon Lane, Peak Forest, Buxton, SK17 8EW	Yes	No	
Ready Mixed Concrete	Northern Concrete, 200 Hadfield Rd, Glossop, SK13 2EP	Yes	No	
Ready Mixed Concrete	RBS Concrete, The Old Goods Yard, Off Midland Road, High Peak, Chapel-en-le-Frith, SK23 9RE	Yes	No	
Ready Mixed Concrete	1, Harpur Hill Business Park, 34A Cedar Ave, Buxton, SK17 9JL	Yes	No	
Ready Mixed Concrete	46, Elnor Lane, High Peak, Derbyshire, SK23 7EU	Yes	No	
Ready Mixed Concrete + Coated stone	Cemex, Dove Holes Quarry, Dale Rd, Buxton, SK17 8BH	Yes	Yes	Strategic
Ready Mixed Concrete	Ernest Hinchliffe, Dowlow Works, Buxton, SK17 9QF	Yes	Yes	Strategic

NORTH EAST DERBYSHIRE				
Infrastructure Type	Location	Currently Operational?	Part Of Existing Mineral Site?	Comment
Ready Mixed Concrete	Holmewood Industrial Park, Park Road, Chesterfield, S42 5UY	Yes	No	

## CHESTERFIELD

Infrastructure Type	Location	Currently Operational?	Part Of Existing Mineral Site?	Comment
Ready Mixed Concrete	Brimington Road, Chesterfield S41 9BE	Yes	No	
Ready Mixed Concrete	Sheepbridge Industrial Estate, Broombank, Chesterfield Road, Chesterfield, S41 9QJ	Yes	No	
Ready Mixed Concrete	Unit 11, Armytage Industrial Estate, Chesterfield, S41 9ET	Yes	No	
Coated Stone	Chesterfield Macadam, 49 Brimington Road, Chesterfield, S41 9BE	Yes	No	
Ready Mixed Concrete	Cemex, Chesterfield Plant, Storforth Lane, Chesterfield, S40 2TU	Yes	No	

## DERBYSHIRE DALES

Infrastructure Type	Location	Currently Operational?	Part Of Existing Mineral Site?	Comment
Ready Mixed Concrete	Chestnut House, 183 The Hill, Cromford , DE4 3QU	Yes	No	
Ready Mixed Concrete	Ryder Point Rd, Matlock, Derbyshire, DE4 4HE	Yes	No	
Ready Mixed Concrete	Unit 1, Wellington Place, Blenheim Rd, Ashbourne, Derbyshire, DE6 1HA	Yes	No	

## DERBY CITY

Infrastructure Type	Location	Currently Operational?	Part Of Existing Mineral Site?	Comment
Ready Mixed Concrete	Aggregate Industries Megaloughton Lane, Derby, DE21 7BR	Yes	No	
Ready Mixed Concrete	Chaddesden Quarry, Chequers Road, Derby, DE21 6EP	Yes	No	20,000 cubic metres annual output
Ready Mixed Concrete	Warren Lane, Derby, DE74 2RG	Yes	No	

## AMBER VALLEY

Infrastructure Type	Location	Currently Operational?	Part Of Existing Mineral Site?	Comment
Ready Mixed Concrete	Midland Industrial Estate, Belper, DE56 2HX	Yes	No	
Ready Mixed Concrete	Pye Bridge Industrial Estate, Alfreton, DE55 4NX	Yes	No	

## EREWASH

Infrastructure Type	Location	Currently Operational?	Part Of Existing Mineral Site?	Comment
Ready Mixed Concrete	Cemex, Slack Lane, Heanor, DE75 7GX	Yes	No	

**SOUTH DERBYSHIRE**

<b>Infrastructure Type</b>	<b>Location</b>	<b>Currently Operational?</b>	<b>Part Of Existing Mineral Site?</b>	<b>Comment</b>
Ready Mixed Concrete	90, Donisthorpe Lane, Swadlincote, DE12 6BB	Yes	No	
Ready Mixed Concrete	Swarkestone Quarry, Twyford Road, Swarkestone, DE73 7HA	Yes	Yes	Strategic
Ready Mixed Concrete	Shardlow Quarry, Aston Lane, Weston on Trent, DE72 2SP	No	Yes	Strategic
Ready Mixed Concrete	Elvaston Quarry	No	Yes	
Ready Mixed Concrete	Bridge St, Swadlincote, DE11 8EL	Yes	No	

## APPENDIX 9.2C: SITES PRODUCING RECYCLED AGGREGATE

### CHESTERFIELD BOROUGH

Site Name	Comment
Muktubs, Armytage Ind Est	
Muktubs, Brimington Rd Nth	
Banks Skip Hire, New Whittington	
Trevor Pearson, New Whittington	
FCC, Broom Bank Road, Sheepbridge	
Wards, Newbridge Lane, Chesterfield	

### BOLSOVER DISTRICT

Site Name	Comment
Brids, Barlborough	

### NORTH EAST DERBYSHIRE

Site Name	Comment
Former Doe Lea colliery	
Hopkinson Waste	

### HIGH PEAK

Site Name	Comment
Doveholes Quarry	
Melland's, Fernilee	
Beeson's, Padfield	

## DERBYSHIRE DALES

Site Name	Comment
Stacey Processing, Hopton	
Slinter Top Quarry	
Peak Waste, Kniveton	

## AMBER VALLEY

Site Name	Comment
Bosworth, Mackworth	
JC Balls, Ambergate	Inactive
FCC Cotes Park	
Pye Bridge (Derwent Skips)	
Leedale, Alfreton	
Cheap Skips, Ambergate	
JC Balls, Alfreton	Two permitted sites – opposite sides of the road

## EREWASH BOROUGH

Site Name	Comment
Freeberne, Little Eaton	
Johnson Aggregates, Ilkeston	Recycled aggregate from Incinerator Bottom Ash
Trust Utilities, Ilkeston	Think this site has been split in two. Two operators – Trust Utility and Aggrecom
Wards – Hallam Field Road, Ilkeston	
Stanton Recycling, Ilkeston	

## SOUTH DERBYSHIRE

Site Name	Comment
Willshee, Swadlincote	
Rainbow Waste, Swadlincote	

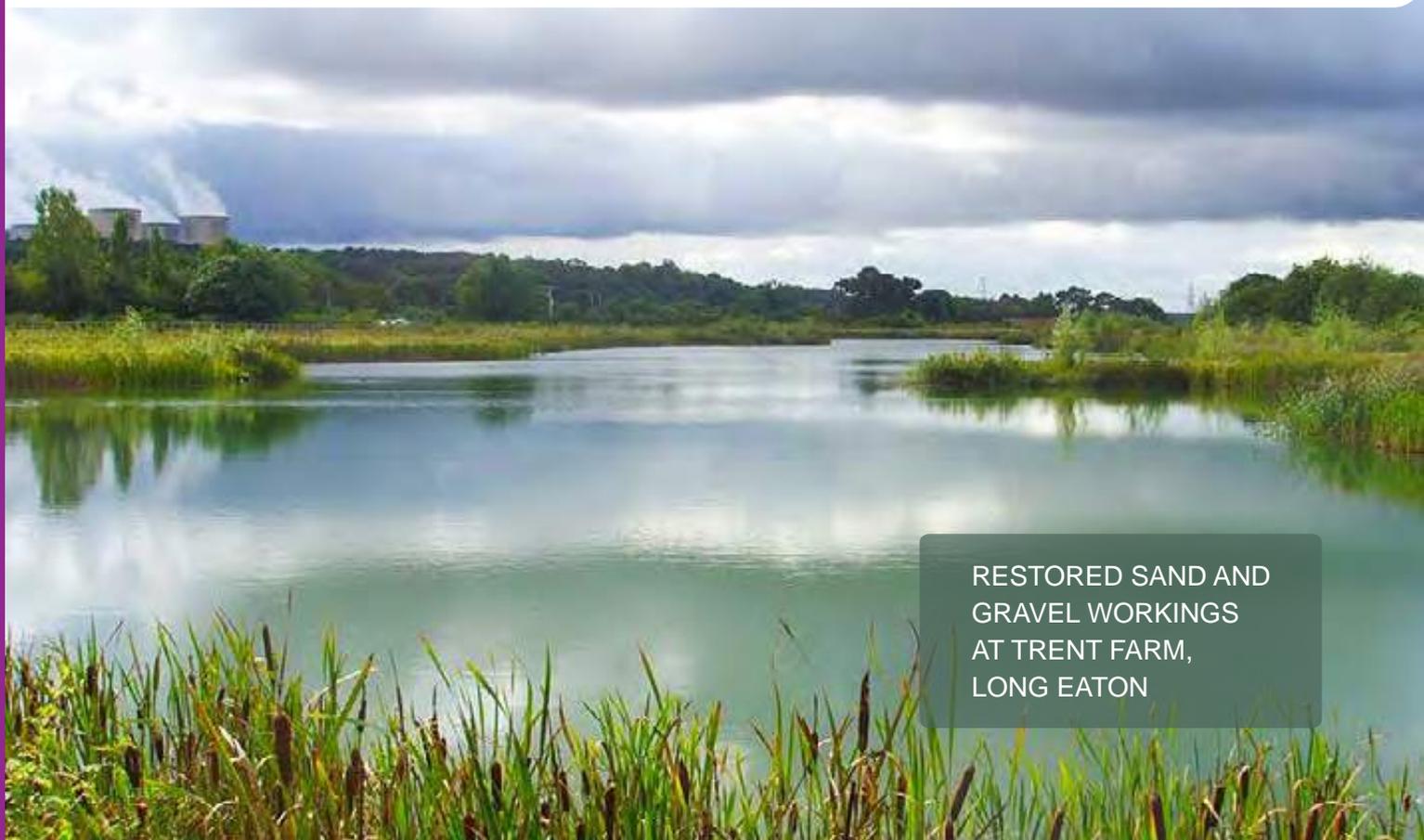
## CHAPTER 10: RESTORATION OF SITES IN THE RIVER VALLEYS

- 10.1 The river valleys in the south of the Plan area, which include the Trent, Derwent and Dove Valleys, face increasing pressure from new development. The need to identify further sites for mineral extraction and the allocation of land for new housing growth and infrastructure will place further demands on the landscape in the short and long-term.
- 10.2 At the same time, evidence points to the growing importance of the valleys as an important Green Infrastructure resource, serving existing and new communities, helping to enhance natural capital through the creation of extensive networks of wetland and woodland habitat for nature conservation, as well as the improved management of the existing landscape that would be retained, helping to meet the challenges of climate change and flooding.
- 10.3 The opportunity exists to shape this change, to deliver a new and attractive landscape where people want to live, which attracts visitors to the area, provides new economic investment and development opportunities and is rich in history and wildlife. A new, robust landscape framework would be better able to deal with the increasing demands being placed on it and take advantage of the opportunities presented by mineral extraction and other development.

### THE STRATEGY

- 10.4 Objective 9 of the Plan seeks to ensure that the sustainable restoration of mineral sites takes place. It sets out that mineral development will support the high quality restoration and aftercare of sites to the most appropriate after use taking into account aviation safety, providing maximum local and strategic benefits to the wider area and local communities, including measures to address climate change.
- 10.5 Policy SP1; Sustainable Development, supports proposals for mineral development where they contribute towards a strategic approach to restoration within the Trent Valley area. The Trent Valley area is identified in the policy as an area where a strategic approach to restoration is considered important. It is described as an area where planned sand and gravel extraction coincides with planned housing growth, including a new garden village and new transport infrastructure. It is considered important to adopt a co-ordinated approach to the restoration of sand and gravel sites in the context of the changing landscape of this area and to consider the wider benefits that mineral restoration can contribute towards in terms of landscape character, biodiversity, recreation and public access.

- 10.6 In the past, sand and gravel workings in the Plan Area have been restored to after-uses with an approach that has concentrated on the requirements of the specific site rather than also considering fully its context within the wider surrounding landscape of the river corridor. As sand and gravel workings have developed over a wider area, this approach has resulted in a landscape which has become progressively fragmented; the overall environmental and cultural integrity of the landscape is gradually being altered.
- 10.7 The approach now set out proposes a long term strategy for the restoration of sand and gravel workings in the Trent, Derwent and Lower Dove Valleys, indicating what the valleys should look like in the future and how the restoration of individual sites would fit into this. This will promote a more coordinated landscape scale approach to minerals planning that involves developing an overarching strategy for the working and restoration of former mineral workings in the river valleys. It will play an important part in helping to achieve the long-term vision for the area, as set out in the emerging Trent Valley Vision which is being developed by the County Council.
- 10.8 It will, therefore, help to contribute to the delivery of a new, connected and more attractive, landscape, improving life for existing communities, where people will want to come to live, with new economic and recreational opportunities, and which is rich in history and wildlife and attracts visitors to the area.
- 10.9 Adjoining authorities, through which the River Trent flows, are either in the process of developing or considering similar approaches. Authorities will work together to ensure that the strategies are coordinated across the valleys.
- 10.10 The area covered by this Strategy is shown on Figure 1 below.



RESTORED SAND AND  
GRAVEL WORKINGS  
AT TRENT FARM,  
LONG EATON

# TRENT VALLEY RESTORATION STUDY AREA



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## POLICY SP20: RESTORATION OF SAND AND GRAVEL SITES IN THE RIVER VALLEYS

**10.11 When considering the restoration of sand and gravel sites in the Trent, Derwent and Lower Dove Valley areas, the overall wider context of the site in the valley should be taken fully into account, including the potential for taking a coordinated approach with the restoration schemes of other sand and gravel workings in the area.**

**The Mineral Planning Authority will work with communities and mineral operators and other stakeholders to help ensure that proposals for mineral working in the Trent, Derwent and Lower Dove Valleys show how the restoration of sites will fit in with this long term restoration strategy for sand and gravel sites in the river valleys.**

### POLICY JUSTIFICATION

- 10.12** The strategy will help to achieve the overarching vision for the Trent Valley, as set out in the emerging Trent Valley Vision which is being developed by the county Council.
- 10.13** It will help to maintain and encourage a thriving minerals industry, providing it with a greater degree of certainty regarding the available mineral resource and clarity about the physical constraints that exist to mineral working in the valleys.
- 10.14** It may also encourage mineral operators to revisit former extraction areas (possibly restored) to undertake additional work that might further benefit the broad long term objective for the valleys, for example connecting existing water bodies or providing a link to the river.
- 10.15** The strategy has the opportunity to create more resilient landscapes firstly, through the conservation of areas of highest environmental value (where mineral working is unlikely to be acceptable), secondly with robust mitigation and management in areas where some change is proposed and thirdly through the planning and enhancement of areas currently deficient in these environmental qualities. Environmental, economic and community benefits will result in all cases.
- 10.16** At this stage, a broad policy is included in the Local Plan and the detail of the strategy will be included in a Supplementary Planning Document to be prepared once the Plan is adopted.



DENE QUARRY

# PART THREE

NON-STRATEGIC POLICIES

# CHAPTER 11: DEVELOPMENT MANAGEMENT POLICIES

## INTRODUCTION TO DEVELOPMENT MANAGEMENT

- 11.1 Development management refers to the process of determining planning applications, the subsequent monitoring of authorised development with planning permission as well as the investigation and enforcement against breaches of planning control. Planning applications should clearly explain the purpose of the development, provide details of how the operations will be managed and any measures proposed to reduce or remove adverse effects. The Plan will consider all social, economic and environmental issues that are relevant to each development proposal.
- 11.2 The development management policies are designed to assist in the delivery of sustainable mineral development (Chapter 4) and the strategic priorities (set out in the vision and objectives (Chapter 3)) of the Plan by providing detailed criteria against which proposals for mineral development and mineral related development will be assessed. In general, the development management policies relate to specific, site level criteria such as environmental impacts and standards and provide guidance about how planning applications for minerals development and minerals related development and applications for the review of mineral planning permissions in the Plan area will be assessed.
- 11.3 In the preparation of planning applications, applicants should consult the MPA's local list of information requirements for the validation of planning applications<sup>115</sup> and are encouraged to discuss their proposals with the MPA before submitting a planning application. Early informal consultation with the MPA and statutory consultees will help to identify potential impacts of proposals and potential measures to avoid or minimise them as well as the range of technical assessment work that may be required. Pre-application engagement with the local community and local interest groups can also help to establish potential impacts of a proposed development and improve the quality of decisions on planning applications. The MPA's Statement of Community Involvement provides information on how consultation on planning applications will be carried out<sup>116</sup>.

116 Derbyshire County Council, 1st revised Statement Community Involvement, December 2021; Derby City Council, Revised Statement of Community Involvement, July 2017.

117 Derbyshire County Council, Local Enforcement Plan 2021

## REVIEW OF MINERAL PERMISSIONS

11.4 Minerals development can take place over an extended period of time and many quarries in the Plan Area are currently worked under planning permissions dating from the 1950s and 1960s. Provision for the review of old mineral planning permissions (ROMPs) is contained in the Planning and Compulsory Purchase Act 1991 and the Environment Act 1995. The purpose of the ROMP process is to enable the MPA to apply modern conditions to older permissions which reflect sustainability aspirations and offer appropriate environmental protection. ROMP submissions cannot be refused, and compensation liabilities may apply if working rights are unreasonably affected. However, a ROMP determination process will be conducted by the MPA in a similar way to the planning application process and the more general policies of the Plan will apply during its determination. ROMP applications may also need to be subject to an Environmental Impact Assessment, further information about which is set out in paragraph 11.6 below.

## MONITORING AND ENFORCEMENT

11.5 The effective monitoring of mineral sites to ensure compliance with their planning permissions and conditions and, where necessary, taking enforcement action against breaches of planning control, is very important. The MPA will work closely with other regulators and statutory bodies, such as the Environment Agency, in monitoring and exercising appropriate control over mineral sites, particularly where there is some overlap in respect of their regulatory responsibilities e.g. storage of contaminants or infilling operations. Efficient and effective monitoring can often identify potential problems early and ensure that they are resolved satisfactorily without the need for formal action. However, where it is considered appropriate and expedient to do so enforcement action will be taken. In undertaking its monitoring and enforcement responsibilities, the MPA will have regard to the development plan, including the Minerals Local Plan and any other material considerations. In undertaking its duties, the MPA will also undertake monitoring and enforcement in accordance with the procedures set out in its Local Enforcement Plan<sup>117</sup>, where available.

## ENVIRONMENTAL IMPACT ASSESSMENT

11.6 Due to their scale and nature, many proposals for minerals development are likely to require an Environmental Impact Assessment (EIA). EIA is a process undertaken by applicants as a means of understanding the likely significant environmental effects of the development proposal whether singly or in combination with other development. The results of the EIA in the form of an Environmental Statement (ES) are then submitted to the MPA with the planning application.

- 11.7 Where there is potential for a proposal for minerals development or minerals related development to require an EIA, applicants are advised to consult the MPA well in advance of the planned submission and formally request an opinion as to whether an EIA is required (referred to as a screening opinion) and, if so, its scope (a scoping opinion). The procedures for doing this are set out in the Town and Country Planning (Environmental Impact Assessment) Regulations 2017.

## PERMITTED DEVELOPMENT RIGHTS

- 11.8 Not all mineral or mineral related development requires a formal application for planning permission. The Town and Country Planning (General Permitted Development) (England) Order (GPDO) 2015 Part 17, as amended, permits certain types of minerals and mineral related development, as well as some limited mineral exploration, to take place without the need for express planning permission. These are commonly referred to as 'permitted development rights'. To qualify, the development must be for purposes principally in connection with the winning and working of minerals from the mine, and includes the treatment, storage or removal of minerals and derived wastes. A wider range of other developments, including secondary industry ancillary to the mining operations, e.g. road coatings plants and storage silo, are also permitted under the GPDO subject to the prior approval of the MPA and where the MPA has not formed a view that it is EIA development. Where such approval is required, the MPA will have regard to the development management policies of the Plan.

## DEVELOPMENT MANAGEMENT POLICIES

- 11.9 The NPPF requires that planning policies should '*set out criteria or requirements to ensure that permitted and proposed operations do not have unacceptable adverse impacts on the natural and historic environment or human health, taking into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality*'<sup>118</sup>.
- 11.10 The following sections present a range of development management policies for minerals development and minerals related development. These policies should not be read in isolation and should be applied in conjunction with the strategic policies of the Plan.

## PROTECTING LOCAL AMENITY, HEALTH AND WELL-BEING

- 11.11 Minerals development and minerals related development can often have the potential to cause adverse impacts - including noise, dust, blast vibration and visual impacts - to the amenity, health, wellbeing and safety of local communities. Minerals can only be worked where they exist, and this can sometimes lead to the development of quarries or other mineral workings in close proximity to communities. A key element of the Plan is to ensure that, where such development does need to take place, impacts associated with it can be appropriately managed and controlled so they do not become unacceptable.

119 Sensitive receptors can vary depending on whether the impact is visual, noise or dust related but typically include residences,

**11.12 Proposals for minerals development and minerals related development will be supported where it can be demonstrated that there will be no unacceptable impacts to local amenity, health, well-being and safety arising as a result of:**

- **Noise;**
- **Dust;**
- **Blast vibration and air over pressure;**
- **Emissions to air;**
- **Ground contamination;**
- **Land instability;**
- **Visual intrusion to adjoining land uses and users;**
- **Light pollution; or**
- **Transport.**

**Where appropriate, separation distances between a development and other land uses may be applied.**

**All proposals for minerals development and minerals related development will be expected to be accompanied by information sufficient to understand the impacts of the development on local amenity, health, well-being and safety.**

## REASONED JUSTIFICATION

**11.13** Minerals development and minerals related development can often have the potential to cause adverse impacts - including noise, dust, blast vibration and visual impacts - to the amenity, health, wellbeing and safety of local communities. Minerals can only be worked where they exist, and this can sometimes lead to the development of quarries or other mineral workings in close proximity to communities. A key element of the Plan is to ensure that, where such development does need to take place, impacts associated with it can be appropriately managed and controlled so they do not become unacceptable.

- 11.14 The impacts generated by minerals development and minerals related development will vary according to the location and the nature of the development proposed. Issues that will need to be considered in respect of any planning application include the local topography; proximity to, and compatibility with, other surrounding land uses and the degree to which any adverse impacts on sensitive receptors<sup>119</sup> are capable of being mitigated.
- 11.15 In line with national planning policy and guidance, all proposals for minerals development and minerals related development should ensure that any unavoidable noise, dust and particle emissions and any blasting vibrations/impacts from air-over pressure are suitably controlled, mitigated or removed at source. Appropriate measures to control and mitigate potential noise impacts can include the establishment of appropriate noise limits for minerals extraction and related activity at identified noise sensitive properties; the use of noise suppression equipment on plant and machinery or restrictions on site operating hours. Further guidance on noise assessment is provided within PPG<sup>120</sup> and the Explanatory Note of the Noise Policy Statement for England (NPSE)<sup>121</sup>. British Standard BS4142:2014+A1:2019: Methods for rating and assessing industrial and commercial sound (June 2019) also provides detailed information on how to rate and assess industrial and commercial sound.
- 11.16 Quarries can generate significant dust emissions associated with blasting and the handling, movement and processing of minerals within sites as well as on the surrounding highway network. Quarry plant and the movement of minerals to market by road can also generate carbon emissions. All proposals will need to demonstrate that they will not have an adverse impact on air quality through either dust deposition or emissions to air. Where necessary, applications will be required to include an assessment of the likely impacts of dust on air quality during the construction, operation and restoration phases of the development. It is expected that this should include details of appropriate mitigation measures such as the use of dust suppression equipment, the temporary suspension of dust-causing activities during unfavourably dry or windy conditions and the use of road sweepers and wheel-washing equipment to limit the spread of dust or mud off-site. Dust monitoring may need to be carried out where dust generating activities are to be carried out close to neighbouring sensitive properties. Careful design of quarry site layout, maintenance and operations, as well as sustainable modes of transport, can all assist in reducing emissions to air. Further information about air quality assessment is set out in PPG<sup>122</sup>.

retirement/care homes, hospitals, schools, tourist accommodation etc

120 PPG, Paragraph 020 onwards, Reference ID: 27-020-20140306

121 [Noise policy statement for England](#)

122 PPG, paragraph 005 onwards, reference ID 32-005-20191101 (November 2019)

123 PPG-Minerals, paragraph 013 Reference ID:27-013-20140306 (March 2014)

- 11.17 Quarry blasting can result in impacts such as vibration and air-over pressure. HGV movements can also cause vibration. These have the potential to impact on local amenity. Proposals will be expected to demonstrate that such impacts are capable of being kept to a minimum using appropriate mitigation measures such as blast design. Blast vibration limits may be imposed and blast monitoring undertaken where development is proposed close to neighbouring properties. Further guidance on the effects of blast vibration and appropriate upper limits can be found in the following publications: British Standard BS6472-2:2008, Guide to Evaluation of Human Exposure to Vibration in Buildings Part 2: Blast-Induced Vibration; and British Standard BS7385-2: 1993 Evaluation and measurement for vibration in buildings – Part 2: Guide to damage levels from groundborne vibration. Whilst PPG<sup>123</sup> indicates that the environmental effects of blast vibration should be considered, it does not offer any specific guidance, either on assessment methodology or allowable limits.
- 11.18 Minerals development and minerals related development can have the potential to lead to impacts associated with emissions to air through the use of quarry plant and machinery, the use of HGVs to transport mineral products from site the use of kilns and cement plants. Certain forms of mineral development can also result in the release of greenhouse gases into the atmosphere. This can be directly e.g. through the flaring of waste gas for safety reasons or indirectly, due to the design of a facility. Dependent on the type of mineral development proposals, overall responsibility for regulating such emissions may not fall directly to the MPA, instead coming under the Environmental Permitting regime regulated the Environment Agency. However, paragraph 186 of the NPPF requires planning policies and decisions to sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Proposals for minerals development and minerals related development will be expected to demonstrate that they would not result in adverse impacts associated with emissions to air and be compliant with any local air quality action plan. Opportunities to improve air quality or mitigate impacts should be identified. Further information about air quality assessment is set out in PPG<sup>124</sup>.

124 PPG, paragraph 005 onwards, reference ID 32-005-20191101 (November 2019)

125 [Planning applications and Coal Mining Risk Assessments](#)

- 11.19** Minerals development and minerals related development can involve the storage of pollutants such as fuels or explosives. Inappropriate storage of these substances could result in ground contamination and pollution of ground and surface waters. Mineral workings can also take place on previously contaminated land or, in the case of coal or hydrocarbons, act as a contaminant themselves. Proposals will be expected to demonstrate that they would not result in ground or water contamination. Where the use and storage of potential sources of pollution are proposed, the likely pathways through which contamination could travel and any receptors (people and environmental) which may be affected should be identified and mitigation measures, including containment, appropriate storage and management, should be provided. These issues might also be required as part of the Environmental Permitting regime which is separate to the planning process and regulated by the Environment Agency.
- 11.20** Proposals should provide evidence to demonstrate that mineral workings have been designed to protect the stability of land and prevent landslip both within the site and on adjoining land. Where land instability is likely to be an issue, a geotechnical report should be provided setting out appropriate measures, including appropriate designed quarry slopes and tip slopes, proposed methods of working etc to ensure the continued stability and integrity of any slopes and to ensure the risk of instability is kept to a minimum. Where risks of instability cannot be adequately mitigated, there may be a need to leave some parts of the site unworked, or to allow for margins within or around the site. Parts of the Plan Area have been subject to extensive underground working which has resulted in subsidence issues. Subsidence generally occurs through a loss of support beneath the ground and is more likely to occur where underground working has taken place or as a result of the underlying geology.

- 11.21 The Coal Authority has identified a number of Development High Risk Areas<sup>125</sup> where past coal mining activities have led to a higher likelihood of land instability issues. In these areas, development proposals (other than those identified on the Development High Risk Exemptions list), will be required to be accompanied by a Coal Mining Risk Assessment. The Coal Mining Risk Assessment should identify the site-specific coal mining risks, the risks these pose to new development, the mitigation measures required and how coal mining issues have influenced the proposed development scheme. In the 'Low Risk Areas' there is no requirement to provide a Coal Mining Risk Assessment but the relevant standing advice from The Coal Authority will be applicable. Proposals for hydraulic fracturing in former coalfield areas which have been extensively mined for coal have the potential to exacerbate issues associated with subsidence and land instability. In line with the requirements of Policy SP17: Supply of Hydrocarbons, the MPA will require applicants to establish the extent of geological faulting in an area and/or the location of past coal seams or other mining activity to protect the integrity of the geological structure and reduce the likelihood of induced seismicity, particularly where hydraulic fracturing is proposed.
- 11.22 Visual impacts associated with minerals development and minerals related development will be dependent on the duration, scale and nature of the development proposed as well as the sensitivity of its surrounding environment. All proposals should be designed to ensure that they are located in the least visually sensitive location possible and include measures to minimise any potential visual impacts. Such measures could include the colour and location of buildings and fixed processing plant or the location and height of stockpiles. Landscape treatments such as rollover slopes or additional screen planting, as appropriate, may also assist in minimising visual impacts. Further guidance on assessing the likely landscape and visual impacts of development has been published by the Landscape Institute in collaboration with the Institute of Environmental Management and Assessment (IEMA)<sup>126</sup>.

126 Landscape Institute/Institute Environmental Management and Assessment document 'Guidelines for Landscape and Visual Impacts Assessment' 3rd edition (2013)

127 [Guidance Note 1 for the reduction of obtrusive light 2021](#)

- 11.23** The use of external lighting in quarries can result in light pollution during periods of darkness. This can affect the amenity of local communities, be harmful to wildlife and detract from the enjoyment of the countryside and the night sky. It can also affect the setting of heritage assets, especially if the asset is experienced at night or is floodlit. The effects of light pollution can be mitigated through restricting hours of use, adjusting the height and angle of lighting and using shields and guidance, such as that from the Institute of Lighting Professionals Guidance Notes for the Reduction of Obtrusive Light<sup>127</sup>), should be considered before submitting an application. The circumstances where a lighting assessment may be required will be dependent on the scale and location of a proposal and the sensitivity of the surrounding area. Proposals located in the open countryside, close to heritage assets or where they may result in an adverse effect on biodiversity or which are in close proximity to residential dwellings that could result in an adverse effect on amenity will normally be required to include a lighting assessment.
- 11.24** The movement of heavy goods vehicles to and from quarry sites can result in increases in traffic and congestion, damage to roads and their verges, vibration, noise, dust and mud. Perceived risks to human safety can also occur, particularly on rural roads with no pedestrian footway or close to areas of population. Such impacts can be mitigated through control of vehicle routing and numbers; hours of operation; the sheeting of lorries; wheel cleaning facilities; and highway improvements and maintenance. Some of these measures may need to be secured via planning obligation, particularly where they relate to matters outside the development site.
- 11.25** In specific circumstances, proposals for minerals development or minerals related development close to residential property or other sensitive receptors may not provide adequate protection. In such cases, it may be justified to consider adequate separation distances. Any such distance should be effective but reasonable, taking into account: the nature and duration of the activity proposed; the need to avoid undue sterilisation of mineral resources; location and topography; the characteristics of the various environmental effects likely to arise; and the various mitigation measures that can be applied. Notwithstanding this, operations in proximity to residential property may be necessary where there are clear, specific achievable objectives such as the removal of instability and preparing land for subsequent development. Such operations should be for a limited and specified period, without scope for extension.

## CRITERIA FOR ASSESSING THE BENEFITS OF MINERALS DEVELOPMENT

- 11.26** National policy states that it is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs<sup>128</sup>. It goes on to say that, when determining planning applications, great weight should be given to the benefits of minerals extraction, including to the economy<sup>129</sup>. The exception to this is in relation to the extraction of coal, which, it says, should not be granted planning permission unless it is environmentally acceptable or, if not, then it provides national, local or community benefits which outweigh its likely impacts (taking all relevant matters into account, including any residual environmental impacts)<sup>130</sup>.
- 11.27** In line with the requirements of the NPPF, with the exception of proposals for coal extraction (where environmental acceptability must be established prior to assessing any benefits that a development proposal might bring), the benefits of proposals for mineral extraction will be given great weight in the decision making process and balanced against any environmental effects, including environmental harm, in accordance with the other policies of the Plan.
- 11.28** Where proposals are for coal extraction, the weight to be attached to any potential benefits will be assessed on a case-by-case basis in line with the requirements of Policy SP16: Coal and Colliery Spoil Disposal. As set out in Policy SP16, only sub-paragraphs 2 and 3 of policy DM2 will apply. More information on proposals for coal extraction and the disposal of colliery spoil is set out in Chapter 8.1.

129 Paragraph 211, revised NPPF, (July 2021)

130 Footnote 71 and paragraph 217, NPPF (July 2021)

131 For the purposes of this Plan, the term sensitive areas will reflect the definition set out in Regulation 2: Interpretation of the Town and

## POLICY DM2: CRITERIA FOR ASSESSING THE BENEFITS OF MINERALS DEVELOPMENT PROPOSALS

- 11.29
- 1) **With the exception of development proposals involving coal extraction, the MPA will give great weight to the benefits of minerals extraction.**
  - 2) **In assessing the benefits of all proposals for minerals development, including coal extraction, consideration will be given to the following matters:**
    - a) **The economic benefits of maintaining a steady and adequate supply of mineral to meet national, sub national and local need, including contributions to economic growth, maintaining existing employment and the creation of new employment opportunities either directly or indirectly as a result of the proposal;**
    - b) **The relinquishment of permitted reserves in Sensitive Areas<sup>131</sup>;**
    - c) **The sustainability benefits associated with the conservation of minerals resources of local and national importance through the prioritisation of the provision of recycled and secondary aggregates;**
    - d) **Environmental enhancements to the site and its surrounding area, including the delivery of biodiversity net gain, the enhancement of landscape character, ecological networks and natural capital and enhanced public access within the Plan area, through the appropriate restoration and after-use of the site;**
    - e) **The avoidance of a mineral resource being sterilised by non-mineral development or in the case of prior extraction, the contribution this can make to enabling a non-mineral development taking place;**
    - f) **The contribution towards the reclamation of areas of derelict or contaminated land and/or the remediation of legacy issues associated with historic mineral working;**

Continues on next page

Country Planning (Environmental Impact Assessment) Regulations 2017 and will include land notified under section 28(1) (sites of special scientific interest) of the Wildlife and Countryside Act 1981; the Peak District National Park; the Derwent Valley Mills World Heritage Site; a scheduled monument within the meaning of the Ancient Monuments and Archaeological Areas Act 1979; and a European Site

132 Paragraph 105, revised NPPF, July 2021

- g) **The extent to which the proposal assists in reducing greenhouse gas emissions through the use of sustainable technologies, climate change adaptation and mitigation measures (during both the operational and restoration phases), carbon offsetting or other appropriate mechanism; mineral development taking place;**
  - h) **The extent to which the proposal would assist in reducing flood risk or contributing towards flood alleviation measures;**
  - i) **The use of rail transport, water transport, conveyors and pipelines where these methods are used instead of road transport; and**
  - j) **Community benefits where they can be demonstrated to be necessary and directly related to the development.**
- 3) Other benefits that are not listed in (2) above but which are considered material planning considerations relevant in respect of a proposal will be considered on a case by case basis where evidence of these other benefits can be provided in support of a planning application.**

## REASONED JUSTIFICATION

- 11.30** In addition to providing a steady supply of minerals, minerals development can also bring other, sometimes significant, social, economic and environmental benefits including employment opportunities, the reclamation of contaminated/derelict land and the delivery of environmental enhancements including significant biodiversity net gain, improved public access and enhanced flood alleviation measures.
- 11.31** Policy DM2 seeks to identify the key matters or benefits that will be given weight when determining planning applications within the Plan Area for minerals development. The criteria set out in Policy DM2 are not intended to be an exhaustive list of the benefits of minerals extraction and the MPA acknowledges that other benefits, specific to an individual proposal, may exist. Where an applicant puts forward other benefits which are not listed in Policy DM2, they will be considered by the MPA where they are material planning considerations and are directly relevant to the proposal.

## TRANSPORTING MINERALS

- 11.32** Minerals development and minerals related development can generate large volumes of HGV traffic which can adversely impact local communities through noise, dust, vibration and air pollution. Increased levels of traffic can also result in damage to the highway, increase levels of greenhouse gas emissions impacting on climate change and cause potential safety issues and issues of severance for other users of the highway. In order to ensure that such impacts are kept to a minimum, the Plan seeks to encourage more sustainable forms of transport.

**11.33 All proposals for minerals development and minerals related development should seek to maximise sustainable modes of transport, including rail, barge, conveyor and pipeline.**

**Proposals for new minerals development and minerals related development utilising road transport will only be supported where it can be demonstrated that:**

- 1) Road transport is the only practicable or environmentally preferable alternative;**
- 2) Proposed access arrangements would not have any significant adverse impacts on highway safety, air quality including carbon emissions, local and residential amenity, the environment or the effective operation of the highway network; and**
- 3) The highway network is of an appropriate standard for use by the traffic generated by the development or can be suitably improved.**

**Where proposals involve the transport of minerals by road, they will be expected to provide details, proportionate to the scale of the development, of proposed climate change adaptation and mitigation measures required to reduce or offset carbon emissions generated by traffic movements associated with the proposal.**

**In order to ensure these requirements are met and maintained, developments may be subject to the completion of appropriate planning obligations relating to signage, traffic routing, any necessary improvements to the highway or climate change adaptation and mitigation measures where these cannot be secured by planning condition.**

## REASONED JUSTIFICATION

**11.34** The NPPF<sup>132</sup> requires that, in order to help reduce congestion and emissions, improve air quality and public health, significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel or by offering a choice of transport modes. It acknowledges that opportunities to maximise sustainable transport solutions will vary between urban and rural areas. Specifically, with regard to minerals, the NPPF<sup>133</sup> says that MPAs should ensure that permitted or proposed operations do not have unacceptable adverse impacts on the natural and historic environment or human health.

133 Paragraph 210(f) revised NPPF, July 2021

134 PPG, paragraph 001 onwards, Reference ID: 42-001-20140306 (March 2014)

- 11.35** Two Local Transport Plans (LTP) have been produced for the Plan Area, both covering the period 2011 to 2026. They are the Derbyshire Local Transport Plan 3 2011-2026 (April 2011) and the Derby Local Transport Plan, LTP3 2011-2026. Both LTP share a common set of goals which can be summarised as: supporting a resilient local economy; tackling climate change; contributing to better safety, security and health; promoting equality of opportunity; and improving quality of life and promoting a healthy natural environment.
- 11.36** Minerals can only be worked where they are found and this can often be in a remote location, away from the strategic road network or other transport links. As a consequence, whilst some sites do export via rail, the majority of minerals extracted in the Plan Area are currently transported to market by road.
- 11.37** In order to minimise overall transport distances, as well as the potential for adverse impacts on local communities, proposals for minerals development and minerals related development should be located as close to their end markets as possible. The MPA acknowledges, however, that this is not always possible, particularly where the site is needed to supply a regional or national market. In these circumstances, alternative, more sustainable forms of transport, such as rail freight, should be considered. All planning applications for minerals development and minerals related development will be expected to demonstrate that potentially more sustainable non road-based options for transporting minerals have been considered. Where such options have been discounted, proposals will be expected to demonstrate the reasons for doing so, why road transport is the preferred option and whether there is potential for future review during the lifetime of the development. Applicants will be encouraged to consider the use of sustainable haulage practices such as promotion of the Fleet Operator Recognition System (FORS), or equivalent; back-hauling; the adoption and promotion of low emission HGV fuel choices e.g. hydrogen and electric and infrastructure as the technology develops. Proposals should also consider sustainable travel to work modes such as secure and covered cycle and e-scooter parking, providing electric vehicle (EV) charging points or car share schemes.
- 11.38** The MPA recognises that more sustainable, non-road transport options such as rail, pipeline, conveyor and barge can potentially generate adverse environmental impacts, or give rise to other land use issues, themselves. For example, conveyors can be noisy and unsightly, particularly where they are located above ground or travel for long distances. In some instances, they may also require significant amounts of fuel to operate. Rail freight requires a feasible connection to the existing railway network as well as sufficient space to create new sidings and other infrastructure such as hoppers, silos and lifting equipment. Careful consideration therefore needs to be given to the appropriate siting and use of alternative, more sustainable, modes of transport where they are proposed. In considering proposals for minerals development and minerals related development where more sustainable modes of transport are proposed, the MPA will assess the benefits on a case by case basis.

- 11.39 Where road traffic is unavoidable every effort should be undertaken to avoid residential and minor roads. It would not be desirable to allow proposals which could exacerbate any existing transport impacts or create unacceptable new impacts. The transport implications of the proposed development will be taken into account including the suitability of the road network to accommodate the traffic that would be generated and the effect on highway safety.
- 11.40 All proposals should be accompanied by a Transport Assessment (TA) or Transport Statement (TS), proportionate to the scale and nature of the development proposed, identifying the likely predicted transport issues and what measures will be needed to manage those issues. Such measures may include, but are not limited to, works to improve junction visibility or vehicle capacity, the use of routing agreements to control traffic movement and direct vehicles away from sensitive areas such as residential areas or important habitats, or improvements to the existing transport infrastructure. Guidance relating to the production of transport assessments as well as the environmental impacts of transport is set out in PPG<sup>134</sup>.
- 11.41 Applicants are encouraged to undertake pre-application discussions with the relevant Highway Authority which, dependent on a site's location within the Plan Area, would be Derby City Council or Derbyshire County Council for the local highway network and Highways England for the Strategic Road Network), to establish whether a TA is required, and, if so, the scope of the assessment required to consider the transport and related environmental impacts of the proposed development. Where proposals involve the transport of minerals via rail or barge, early engagement with the relevant statutory consultee such as Network Rail, British Waterways, the Canal and Rivers Trust or the Environment Agency is advised.
- 11.42 Where the MPA considers that the road network is inadequate for the amount or type of movements associated with a development proposal, legal agreements will be sought to achieve appropriate improvements to mitigate the adverse impacts. Pre-commencement condition surveys of the highway may be required to enable the MPA to accurately monitor direct impacts of increased HGV use associated with a development on the surrounding highway network and, where appropriate contribute to the maintenance of the highway network. Where necessary, routing agreements will also be used to ensure that adequate/appropriate routes are used to prevent unacceptable adverse impacts on local communities. The developer may also be required under S278 and S38 agreements of the Highways Act 1980 to make alterations to the highway network.

## LANDSCAPE

- 11.43** The Plan Area is characterised by its diverse landscapes, some of exceptional quality and natural beauty, ranging from the upland moors of the Peak District to the expansive floodplains of the Trent Valley. Parts of the Plan Area have also been subject to significant levels of past human activity, including the exploitation of minerals or heavy industry, which has resulted in those landscapes becoming fragmented through loss of its intrinsic character. Such diversity is largely a result of the varied underlying geological conditions that also make the Plan Area mineral resource rich and, as a consequence, mineral extraction has been widespread throughout.
- 11.44** Landscape can also be valued for more than its natural beauty, providing habitats for wildlife and evidence of historic activity. It also has a social and community value, providing space for recreation and exercise as well as an economic value, providing the context for economic activity and often being a central factor in attracting business and tourism.
- 11.45** The scale and nature of mineral development and minerals related development means it can have both temporary and permanent impacts on existing landscapes, depending on the type of mineral, how sites are worked and subsequently restored. Landscape features such as trees, hedgerows or drystone walls, water bodies and footpaths might be altered and new landforms are likely to be created. Whilst such changes have the potential to be harmful to landscape character, carefully designed mineral development can also result in positive changes, providing the opportunity to repair fragmented landscapes and enhance wider views or local landscape character and distinctiveness.

**11.46 Proposals for minerals development and minerals related development will be supported where it can be demonstrated that the proposal would not result in significant harm to the character, quality or sensitivity of the landscape or to important features or views, or other perceptual qualities such as tranquillity unless the benefits of the development clearly outweigh the impacts.**

**All proposals will be expected to be accompanied by information sufficient to understand the impacts of the development on landscape character, visual amenity and landscape sensitivity having regard to the content of the relevant local landscape character assessment and supporting technical documents and contribute, where appropriate, to the conservation and enhancement, or restoration and recreation of the local landscape.**

**Proposals located within the setting of the Peak District National Park will also be expected to be sensitively located and designed, having regard to the content of any relevant adopted landscape strategies, to avoid or minimise adverse impacts on the National Park.**

**Proposals located within the Trent Valley will be expected to have regard to the requirements of Policy SP20 : Restoration of Sand and Gravel Sites in the River Valleys.**

### REASONED JUSTIFICATION

**11.47** National planning policy<sup>135</sup> seeks to conserve and enhance the natural and local environment. In landscape terms this should be achieved through the protection and enhancement of valued landscapes, recognising the intrinsic character and beauty of the countryside. Great weight is also given to conserving and enhancing landscape and scenic beauty in national parks, and development in their setting should be sensitively located and designed to avoid or minimise adverse impacts<sup>136</sup>. In order to implement this policy, both mineral working and restoration schemes should be informed by the landscape character of the area, ensuring that the schemes fit into, respect and connect with the surrounding landscape.

136 Paragraph 176 of revised NPPF, July 2021

137 Peak District Land Strategy

- 11.48** Landscape and, in the case of Derby City, townscape character assessments, have been produced which cumulatively cover the entire Plan Area. A further landscape character assessment has also been produced by the Peak District National Park Authority<sup>137</sup>. The Landscape Character of Derbyshire<sup>138</sup> has identified ten broad National Character Areas (NCAs) – Dark Peak; White Peak, Derbyshire Peak Fringe and Lower Derwent; Nottinghamshire, Derbyshire and Yorkshire Coalfield; Southern Magnesian Limestone; Needwood and South Derbyshire Claylands; Trent Valley Washlands; Melbourne Parklands; Leicestershire & South Derbyshire Coalfields and Mease-Sence Lowlands - each of which includes a number of smaller Landscape Character Types (LCTs) each with its own landscape characteristics. The document also provides woodland and tree planting, landscape management and habitat creation guidance appropriate to the each LCT.
- 11.49** The documents are intended to be used as guidance to assist developers to identify and, ultimately, design development proposals that include appropriate mitigation measures and restoration schemes, based on locally distinctive landscape features and elements.
- 11.50** National planning policy does not define what is meant by the term ‘valued landscapes’. However, as set out in paragraph 11.43 above, landscape (and the wider countryside in general) is often valued for reasons other than its natural or aesthetic qualities, even where the landscape would be considered fragmented or not of exceptional quality. These can include ‘perceptual qualities’ such as its sense of wildness, remoteness, dark skies or tranquillity; the opportunities it provides to local communities and visitors to the Plan Area for health, outdoor recreation and emotional and physical wellbeing; its importance to biodiversity and locally distinctive ecological networks; and evidence of historic human activity and influence. Derbyshire County Council has produced two technical support documents, relating to Areas of Multiple Environmental Sensitivity and Tranquillity<sup>139</sup> which, working within the established framework of landscape character types, have been designed to enable the adoption of an holistic approach to identify those areas of landscape of ‘multiple environmental sensitivity’ relating to ecology, the historic environment, and visual unity. Similar work has been undertaken for Nottinghamshire.

138 The Landscape Character of Derbyshire, 4th edition, Derbyshire County Council (December 2013)

139 Technical Support Document 1: Areas of Multiple Environmental Sensitivity, Derbyshire County Council, (2013), and Technical Support Document 2: Tranquillity, Derbyshire County Council, (2013).

140 Paragraph 176, revised NPPF, July 2021

- 11.51 The Plan Area contains a number of large quarries that are either located close to or cross the administrative boundary of the Peak District National Park. For development proposals located within the setting of the Peak District National Park, national policy<sup>140</sup> requires development located in the setting of a national park to be sensitively located and designed to avoid or minimise adverse impacts to that designation. In exercising any of its functions, including planning matters, Part III, paragraph 62, of the Environment Act 1995 places a duty on local authorities to have regard to the purposes for which National Parks are designated, stating that, where there appears to be a conflict between those purposes, it shall attach greater weight to the purpose of conserving and enhancing the natural beauty, wildlife and cultural heritage of the National Park. Proposals for mineral development or minerals related development located within the setting of the Peak District National Park will be required to give consideration to the specific landscape sensitivities of the National Park, or any other feature or attribute which makes up its special quality and sense of place. When designing proposals in such locations, applicants should give consideration to the flow of landscape character across and into the National Park boundary. In addition to the Landscape Character of Derbyshire, consideration should also be given to the Peak District National Park Landscape Strategy and European Landscape Convention Action Plan<sup>141</sup>.
- 11.52 Landscapes within the Plan Area, particularly around the Peak District and the Derwent Valley, are also of significant importance to tourism, generating millions of pounds for the local economy. Proposals for minerals development and minerals related development will be expected to balance their economic need/value against any landscape/visual harm to the wider landscape and any subsequent harm that that may have to its enjoyment and the wider visitor economy.
- 11.53 It is recognised by the MPA that some landscapes in the Plan Area are already at significant risk of harm, either through the legacy of past industry and development or as a result of current development pressures for new housing, employment land and transport infrastructure. The Trent Valley, both in the Plan Area and in adjacent counties including Nottinghamshire and Staffordshire, which has long been a focus for the exploitation of its sand and gravel resources, is under particular threat. The Plan therefore seeks to adopt a strategic approach to restoration through the preparation of a Supplementary Planning Document dealing with the restoration of sand and gravel sites in the River Valleys, as set out at Chapter 10.

141 Peak District Land Strategy

142 PPG, paragraph 036, Reference ID: 8-036-20190721 (July 2019)

- 11.54** To ensure that new minerals development and minerals related development considers existing landscapes and visual impact, a landscape and visual impact assessment, proportionate to the scale and nature of the proposal, will be required for all proposals to identify potential impacts on the surrounding areas. All proposals for the restoration of minerals sites, such as earthworks, after-use and planting, should reflect the landscape character type and national character area as well as taking into account those other qualities for which landscape is valued. Further guidance on how to undertake landscape and visual impact assessments (LVIA) is contained in PPG<sup>142</sup> and in the following Landscape Institute/Institute Environmental Management and Assessment document ‘Guidelines for Landscape and Visual Impacts Assessment’ 3rd edition (2013).

## BIODIVERSITY AND GEODIVERSITY

- 11.55** The Plan Area contains a rich and diverse range of biodiversity and geodiversity assets. In addition to the locally distinct range of flora and fauna within the Plan Area, biodiversity can bring other environmental and socio-economic benefits, including carbon sequestration, health and well-being and tourism. It is essential, therefore, that proposals for minerals development and minerals related development are appropriately managed to ensure that sites of biodiversity and geodiversity value are protected and enhanced.

**11.56** Proposals for minerals development and minerals related development should seek to protect and enhance the nature conservation interest by ensuring that they do not give rise to unacceptable adverse impacts on biodiversity and geodiversity and by providing net gains for biodiversity. Proposals for development will be expected to be accompanied by information sufficient to enable a proper assessment of the implications for biodiversity and geodiversity. The information should be appropriate to the scale of the proposed development and proportionate to the level of designation or the habitats/species likely to be affected.

Development proposals should demonstrate that nature conservation sites, species and habitats of importance will be preserved or conserved and enhanced. The level of protection to be afforded to the asset will be commensurate with its designation and significance. Proposals for minerals development and minerals related development will only be supported where it can be demonstrated, where relevant, that:

- 1) they would not adversely affect, either alone or in combination with other plans and projects, the integrity of any European Site (Natura 2000 sites) unless:
  - a) there are no alternative solutions; and
  - b) there are imperative reasons of overriding public interest; and
  - c) adequate compensatory measures can be taken to ensure the overall coherence of Natura 2000 is protected; or.
- 2) they would not adversely affect the integrity of any nationally designated nature conservation site except where the need for and benefits of the development clearly outweigh the importance of the site and where no suitable alternative exists.

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**Proposals for minerals development and minerals related development should also maintain or enhance biodiversity and geodiversity and recognised sites, species, and habitats of sub-regional or local importance. The level of protection to be afforded to the asset will be commensurate with its level of importance and contribution to wider ecological or geological/geomorphological networks. Proposals for minerals development or minerals related development will be supported where it can be demonstrated that they would not give rise to the loss or deterioration of irreplaceable habitats or geological/geomorphological formations unless the need for, and benefits of, the minerals development or mineral related development in that location clearly outweigh the loss. Proposals will be supported where they deliver significant net gains for biodiversity, based on the government’s published biodiversity metric, and contribute to the establishment of coherent and resilient ecological networks subject to compliance with other policies in the Plan. In achieving this, all proposals will be expected to have regard to the ecological diversity and distinctiveness of the Plan Area. Where necessary, these matters may need to be secured using Planning Obligations.**

## REASONED JUSTIFICATION

- 11.57** National policy seeks to ensure that planning should contribute to and enhance the natural and local environment by protecting and enhancing sites of biodiversity or geological value (in a manner commensurate with their statutory status or identified quality)<sup>143</sup>, minimising impacts on, and providing net gains for, biodiversity including through the establishment of coherent ecological networks that are more resilient to current and future pressures<sup>144</sup>. Plans should clearly distinguish between the hierarchy of international, national and locally designated sites and promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity<sup>145</sup>.

144 Paragraph 174 (d), revised NPPF (July 2021)

145 Paragraph 179, revised NPPF, (July 2021)

146 Paragraph 181 (a), revised NPPF, (July 2021)

- 11.58** The Plan Area possesses an extensive network of statutory and non-statutory sites designated for their biodiversity and/or geodiversity interest. The most significant of these, the 'European sites' (previously known as Natura 2000 sites), are designated at the international level. European sites are considered to be of exceptional importance in respect of rare, endangered or vulnerable natural habitats and species and include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). Within the Plan area there are three European sites – Peak District Dales SAC, Peak District Moors SPA and South Pennine Moors SAC, with a further two (Bees Nest & Green Clay Pits SAC and Gang Mine SAC) located within the Peak District National Park. The River Mease SAC is located on the Derbyshire/Staffordshire border. The Birklands and Bilhaugh SPA and the Sherwood Forest potential (pSPA) are in Nottinghamshire.
- 11.59** The Conservation of Habitats and Species Regulations 2017 confer specific protection on sites of international importance and any proposal that would be likely to have a significant effect on the integrity of a European site, either alone or in combination with other plans or projects would need to ensure that all impacts can be mitigated. Adverse impacts can result from both direct and indirect effects, especially where there are known functional linkages or pathways to the designated site. National policy<sup>146</sup> makes it clear that these protections apply to candidate sites as well as those that have already been designated. Any development that is not directly connected with the management of any European sites, but likely to have a significant effect on them, will require a Habitats Regulations Assessment to be carried out at the planning application stage to ensure that any such effects can be mitigated.
- 11.60** The Plan Area also contains, either partially or wholly, a number of sites that are statutorily designated at a national level including over 53 Sites of Special Scientific Interest (SSSIs) which are designated and protected under the Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act 2000. SSSIs can be notified for their biodiversity or geodiversity interest and the Plan Area contains examples of both. The Plan Area also has one National Nature Reserve (NNR) at Calke Park in South Derbyshire.
- 11.61** Local Wildlife Sites (LWS), Local Nature Reserves (LNR) and Regionally Important Geological Sites (RIGS) are non-statutorily designated sites containing habitats, populations of species or geological formations of at least local/County importance, although their importance can be considerably greater.

- 11.62 The Plan Area also contains other habitats and species that fall outside the scope of the designated sites identified above but which are conferred protection under Section 41 of the Natural Environment and Rural Communities Act 2006. These are known as Habitats of Principal Importance for Conservation in England and Species of Principal Importance in England and are derived from those species and habitats which were previously included in the UK Biodiversity Action Plan (UKBAP). These, together with LWS, LNRs and RIGs are considered to represent important ecological resources, themselves combining to form part of the natural capital of the Plan Area, that occur outside of sites receiving statutory protection and are therefore important material considerations in the determination of planning applications. Derbyshire County Council has recently commenced work on gathering an evidence base to enable it to produce a Natural Capital Strategy and Local Nature Recovery Strategies for the Plan Area outside Derby City.
- 11.63 National policy<sup>147</sup> also sets out a sequential approach to decision making in respect of biodiversity, the so-called ‘mitigation hierarchy’. This requires, in the first instance, that significant harm from development be avoided (usually through relocating a development proposal to an alternative site with fewer harmful impacts), adequately mitigated, or, as a last resort, compensated for. Where this cannot be achieved, then planning permission should be refused.
- 11.64 In those circumstances where applicants consider that compensation is the only option, the MPA will expect any proposal to demonstrate that it would: not lead to any net loss of habitat, provide the same type of ecological features as those which will be affected with equivalent levels of ecological ‘functionality’. Compensation should also be provided as close as possible to the location where the likely impacts will occur and benefit the same habitats and species as those affected. Proposals incorporating ecological compensation should also recognise that, dependant on the type and scale of any habitats and species concerned, these may take a number of years to achieve the quality of the habitats lost.

148 Paragraph 022 onwards (Ref ID 8-022-20190721), PPG, (July 2019).

149 Paragraph 022 onwards (Ref ID 8-022-20190721), PPG, (July 2019)

- 11.65** In addition to the sequential approach, in line with national policy<sup>148</sup> the MPA will expect all proposals for mineral development and mineral related development to deliver significant biodiversity net gain. Biodiversity net gain delivers measurable improvements for biodiversity by creating or enhancing habitats in association with development and can be achieved on-site, off-site or through a combination of on-site and off-site measures. Alongside enhancing the biodiversity of a site or local ecological networks, biodiversity net gain can also assist in the delivery of some of the strategic and sustainability objectives of the Plan including building natural capital, assisting in adapting and mitigating the effects of climate change, improving flood alleviation measures and increased health and well-being of local communities. In order to achieve this, the MPA will expect applicants to demonstrate that any benefits promised will lead to demonstrable gains for biodiversity for current and future generations, will be resilient to future pressures from further development or climate change and have appropriate maintenance measures in place. Where it is not possible to secure biodiversity net gain through the use of planning conditions, the MPA may seek to secure them using planning obligations.
- 11.66** Further guidance on how to achieve biodiversity net gain can be found in PPG<sup>149</sup> and in the following documents: ‘Biodiversity net gain. Good practice principles for development. Part A: A practical guide’ (2019) produced by CIRIA<sup>150</sup> and British Standard BS 8683: 2021 ‘Process for designing and implementing Biodiversity Net Gain’ (August 2021). The MPA will expect applicants to assess Biodiversity net gain using the Government’s published biodiversity metric tool (currently the DEFRA Biodiversity Metric 3.0 but subject to update and refresh) - which is designed to provide a means of assessing changes in biodiversity value brought about by development or changes in land management. The MPA will also be producing a guidance note, designed to accompany the Plan, which will set out its approach to securing Biodiversity Net Gain.
- 11.67** To ensure that new proposals for minerals development and minerals related development assess the impacts of biodiversity and geodiversity, an ecological assessment, proportionate to the scale and nature of the proposal, will be required. Further guidance on how to undertake ecological assessment is set out in PPG<sup>151</sup> and in the CIEEM document ‘Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine’ (2018).

150 ‘Biodiversity net gain. Good practice principles for development. Part A: A practical guide’ (2019) CIEEM

151 Paragraph 036 onwards (reference ID: 8-036-20190721), PPG, (July 2019)

152 Paragraph 174(b), revised NPPF, (July 2021)

## TREES, WOODLAND AND HEDGEROWS

- 11.68** Trees, woodland and hedgerows are important landscape features which, in addition to nature conservation, make a valuable contribution to the wider landscape, contribute to the setting of heritage assets and are also of great amenity value to local communities. Trees also play an important role in adapting and mitigating the effects of climate change through carbon sequestration.
- 11.69** 11.64 Minerals development can have the potential to result in the loss of, or damage to, trees, woodland and hedgerows. Such impacts can be a direct result of, but are not limited to, such operations as the creation of new working areas or the use of heavy plant and equipment without appropriate root protection areas being put in place. Mineral development can, however, also make a positive contribution to the creation of new, woodland, hedgerows, and trees during restoration. Works to existing trees and hedgerows, to strengthen and improve existing linkages and plant specimens or advance planting schemes, are also often undertaken by mineral operators as part of an agreed wider package of works.

**11.70** Proposals for minerals development and minerals related development should seek to protect trees, woodland and hedgerows from loss or damage unless it can be demonstrated that their removal is necessary and appropriate mitigation can be achieved. Proposals for development will be expected to be accompanied by arboricultural information sufficient to enable an assessment of the implications for trees, woodland and hedgerows. Assessments should also identify any trees, woodland and hedgerows of value.

Development that would result in the loss or deterioration of ancient woodland or the loss of aged or veteran trees found outside of ancient woodland will only be permitted where it can be demonstrated that there are wholly exceptional reasons and a suitable compensation strategy exists.

Where the loss of trees, woodland and hedgerows can be justified, replacement provision will be required which, as a minimum, should be of equivalent quality and quantity to the trees and hedgerows to be lost. All new and replacement woodland, tree and hedgerow planting will be expected to be of a species appropriate to the local character and distinctiveness of the site and appropriately managed to ensure that it reaches full maturity. Where necessary, these matters may need to be secured using Planning Obligations.

All proposals should contribute to the protection, enhancement, and where possible expansion of woodlands, trees and hedgerows in the area. Wherever possible, trees, hedgerows and woodland of value should be retained and integrated within proposals for development.

## REASONED JUSTIFICATION

**11.71** National policy requires local plans and planning decisions to contribute and enhance the natural and local environment by recognising the intrinsic character and beauty of the countryside, as well as the wider benefit, which can include economic and other benefits, derived from trees and woodland<sup>152</sup>. It goes on to say that development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused unless there are wholly exceptional reasons and a suitable compensation strategy exists<sup>153</sup>. This issue is dealt with under Policy DM5: Biodiversity and Geodiversity.

153 Paragraph 180(c), revised NPPF (July 2021)

154 Paragraph 199, revised NPPF (July 2021)

- 11.72** Section 197 of The Town and Country Planning Act 1990 places a general duty on planning authorities to ensure, whenever it is appropriate, that in granting planning permission for any development, adequate provision is made, by the imposition of conditions, for the preservation or planting of trees. Hedgerows can be given special protection under the Hedgerow Regulations 1997, which prevent the removal of most substantial hedgerows if they are deemed important in terms of their archaeological, historical, landscape or wildlife value and are at least 30 years old.
- 11.73** Where proposals for minerals development and minerals related development are likely to affect trees, woodland and hedgerows, applicants will be required to identify those trees, woodland or hedgerows that may potentially be affected. Removal of trees, woodland or hedgerows should be avoided where possible. Areas identified for woodland conservation or enhancement and trees covered by Tree Preservation Orders (TPOs) will be afforded particular protection. A tree survey will often be required for proposals affecting trees or proposals to fell trees. Where trees, hedgerows or woodland are intended to be lost as part of a proposal, appropriate compensatory planting should be provided as part of the development. The MPA will support new tree and hedgerow planting and new woodland creation where this expands tree cover in the Plan Area where it has regard to local distinctiveness.
- 11.74** Where necessary, the MPA may seek to secure appropriate management and maintenance regimes for trees, woodland and hedgerows via Planning Obligation where this is not possible through the imposition of planning conditions.

## HISTORIC ENVIRONMENT

- 11.75** The historic environment is about more than just individual buildings, monuments or sites; it includes places, areas or landscapes that have historic significance and the connections between them. Heritage assets and their settings contribute to sense of place, are valued by communities, and can contribute to the economic prosperity of an area. They are an irreplaceable resource which is vulnerable to damage or loss from development and great weight should be given to their conservation so that they can be enjoyed for their contribution to the quality of life of existing and future generations.
- 11.76** Minerals can only be worked where they exist and, as a consequence, there is potential for proposals for minerals development and minerals related development to be located in close proximity to heritage assets, including buried archaeology, or within their settings which may lead to harm to the significance of those assets.

**11.77** Proposals for mineral development and minerals related development will be supported where it can be demonstrated that the proposal would protect and enhance the significance of designated and non-designated heritage assets and their setting(s) and/or the outstanding universal value of the Derwent Valley Mills World Heritage Site.

Development proposals detrimental to the significance of designated and non-designated heritage assets will only be supported where it can be demonstrated that the public benefit of the development would outweigh the harm to the significance of the heritage asset(s). In judging this balance, great weight will be placed upon conservation of the significance of designated heritage assets relative to the importance of the heritage asset affected and the level of potential harm.

Proposals for minerals development and minerals related development affecting heritage assets or their setting will be expected to be accompanied by information sufficient to understand the significance of the heritage assets and the magnitude of any direct or indirect (setting) impact(s) to that significance from the proposed development. The information should be appropriate to the scale of the proposed development and proportionate to the importance of the heritage asset.

Where the benefits of a development proposal are judged to outweigh the desirability of conserving/enhancing the significance of the relevant heritage asset(s), conditions may be attached to planning permissions, or developers required to enter into planning obligations with the MPA, to secure an appropriate programme for the investigation and recording of archaeological or built heritage remains prior to and/or during development, or for other mitigation measures including preservation in situ, and for the information thus gathered to be made publicly accessible through subsequent analysis, publication, dissemination and archiving of results.

Where appropriate, proposals for minerals development or minerals related development should provide for the enhancement of specific features of the historic environment, including individual heritage assets or historic landscapes, as part of their approved restoration scheme.

## REASONED JUSTIFICATION

- 11.78 The Planning (Listed Buildings and Conservation Areas) Act 1990 places a duty on planning authorities to have special regard to the desirability of preserving a listed building or its setting (Section 66(1)) and for special attention to be paid to the desirability of preserving or enhancing the character or appearance of a Conservation Area (Section 72).
- 11.79 National policy<sup>154</sup> requires that, when considering the impact of a proposed development on the significance of a designated heritage asset, irrespective of the level of potential harm to significance, great weight should be given to the asset's conservation. It goes on to say that, the more important the asset, the greater the weight should be.
- 11.80 The Plan Area possesses a significant number of designated heritage assets. The most important of these, the Derwent Valley Mills World Heritage Site, has been inscribed at the international level because of its Outstanding Universal Value. Designated heritage assets at the national level include listed buildings and registered Historic Parks and Gardens, both of which can have Grade I, Grade II\* or Grade II status depending on their importance; Scheduled Monuments; and Conservation Areas. The MPA is aware of a further site, Creswell Crags, which is currently on the UK Government's tentative list to become a candidate World Heritage Site.
- 11.81 Where a proposal for minerals development or minerals related development is likely to lead to substantial harm to, or total loss of significance of, a designated heritage asset, planning permission will not be granted unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss or where all of the following apply:
- a) the nature of the heritage asset prevents all reasonable uses of the site; and
  - b) no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and
  - c) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and
  - d) the harm or loss is outweighed by the benefit of bringing the site back into use<sup>155</sup>.
- 11.82 Where the harm to the significance of a designated heritage asset resulting from minerals or minerals related development is assessed as being less than substantial, the MPA will weigh this against the public benefits of the proposal including, where appropriate, securing its optimum viable use<sup>156</sup>.

155 Paragraph 201, revised NPPF (July 2021)

156 Paragraph 202, revised NPPF (July 2021)

157 PPG, paragraph 039 (Reference ID: 18a-039-20190723) July 2019

- 11.83 The Plan Area also contains non-designated heritage assets. PPG defines non-designated heritage assets as buildings, monuments, sites, places, areas or landscapes identified as having a degree or heritage significance meriting consideration in planning decisions, but which do not meet the criteria for designated heritage assets<sup>157</sup>. When considering development proposals, the MPA is required to take into account the effect of the development on the significance of a non-designated heritage asset. In weighing applications that directly or indirectly affect non-designated heritage assets, the MPA is required to make a balanced judgement having regard to the scale of any harm or loss and the significance of the heritage assets<sup>158</sup>. An exception to this approach is made for non-designated heritage assets of archaeological interest which are demonstrably of equivalent significance to scheduled monuments. Under those circumstances, the MPA is required to consider these subject to the policies for designated heritage assets<sup>159</sup>.
- 11.84 More information about designated and non-designated heritage assets in the Plan Area can be found on the [Derbyshire Historic Environment Record \(HER\)](#), which holds information for the entire Plan Area. Detailed information about the Derwent Valley Mills World Heritage Site, including the overarching Statement of Outstanding Universal Value (OUV) and a list of the attributes of the OUV, and the elements of which they are formed, can be found in the 'Derwent Valley Mills World heritage Site Management Plan 2020-2025'<sup>160</sup>.
- 11.85 The MPA will assess the need for preservation in situ of archaeological sites and remains against their importance and the impact that their loss would have upon the overall archaeological resource of the Plan Area. Although the preservation of archaeological sites is a primary objective, it is clearly impracticable to preserve them all. Equally, sites should not be destroyed without careful consideration and appropriate mitigation. Where preservation in-situ is not feasible, the MPA will expect sites to be surveyed, excavated or otherwise appropriately recorded. These provisions can only be assessed after the archaeological characteristics of proposed development sites have been evaluated. The MPA will seek to secure these matters via planning condition or, where necessary, planning obligation.

158 Paragraph 203, revised NPPF, (July 2021)

159 Footnote 68, revised NPPF (July 2021)

160 [Derwent Valley Mills World Heritage Site Management Plan](#)

161 [Guidance on Heritage Impact Assessments for Cultural World Heritage Properties](#)

- 11.86** Where a development proposal has the potential to affect the significance of a heritage asset, the MPA will expect the planning application to be accompanied by a Heritage Impact Assessment (HIA), proportionate to the scale of the development and importance of the asset likely to be affected. Where an application site is known to include, or has the potential to include, heritage assets with archaeological interest, the MPA will expect the application to include an appropriate desk-based assessment and, where desk-based research is insufficient to properly assess the interest, a field evaluation. In all instances, and as a minimum, applicants will be expected to consult the Derbyshire Historic Environment Record. Further information regarding the production of a Heritage Impact Assessment is set out in PPG. For proposals either located in, or likely to affect the OUV of the Derwent Valley Mills World Heritage site, it is recommended that the HIA be produced using the methodology set out on the International Council on Monuments and Sites (ICOMOS) website<sup>161</sup>.

## WATER MANAGEMENT AND FLOOD RISK

- 11.87** Minerals development and minerals related development has the potential to impact upon the flow and quality of surface water features such as rivers, ditches and lakes as well as groundwater movement. It is therefore important, therefore, that these impacts are avoided through good design and management of minerals sites.
- 11.88** Climate change is likely to lead to increased and new risks of flooding within the lifetime of planned developments. Minerals development and minerals related development need to be appropriately planned and designed to avoid, reduce and where necessary manage flood risk. However, the restoration of existing and new mineral workings in flood risk areas to increase flood water storage and enhance the natural environment can sometimes be beneficial.

**11.89 Proposals for minerals development and minerals related development will be supported where it can be demonstrated that they would not result in unacceptable impacts on:**

- **surface water quality, quantity and flows;**
- **groundwater quality and levels; or**
- **flood flows and conveyance routes, flood storage capacity, the integrity of flood defences and local land drainage systems.**

**All proposals will be expected to incorporate flood risk protection, flood resilience measures appropriate to the character and biodiversity of the area and the specific requirements of the site.**

**Proposals will also need to demonstrate that all phases of development including restoration of the site have been designed to enhance the water management of the site and alleviate the risk of flooding in the long-term.**

**All proposals will be expected to incorporate Sustainable Drainage Systems (SuDS) to manage surface water drainage unless it can be demonstrated that it is impracticable to do so.**

## REASONED JUSTIFICATION

### Flood Risk

**11.90** National policy on flood risk is set out in the NPPF<sup>162</sup>. Detailed guidance on assessing flood risk is also set out in PPG<sup>163</sup>. The aim is to steer inappropriate development away from areas at risk of flooding by directing development away from areas at highest risk (whether existing or future) and to reduce the causes and impacts of flooding. It says that where development is necessary in high risk flood areas, the development should be made safe for its lifetime without increasing flood risk elsewhere<sup>164</sup>. The NPPF also sets out a sequential, risk-based approach<sup>165</sup> for assessing appropriate locations for development, based on the indicative Flood Maps prepared by the Environment Agency<sup>166</sup>; an Exception Test<sup>167</sup>, to assess whether development should be permitted in higher risk areas; and a “hierarchy of options”, to reduce and manage surface water run-off from development sites in high rainfall events<sup>168</sup>. Strategic Flood Risk Assessments have been carried out in 2012 and again in 2021 to inform the preparation of the Plan<sup>169</sup>.

163 PPG, paragraphs Reference ID:

164 Paragraph 159, NPPF (July 2021)

165 Paragraph 161, revised NPPF (July 2021)

166 [Flood map for planning](#)

167 Paragraphs 163 – 166, revised NPPF (July 2021)

168 Paragraphs 167 and 169, revised NPPF (July 2021)

169 Derbyshire County and Derby City Councils SFRA Level 1 Aug 2012 and January 2022

170 Annex 3: Flood Risk Vulnerability Classification, NPPF (July 2021)

- 11.91 Proposals for minerals development and minerals related development that are not allocated in the Plan which fall in identified areas of flood risk will be required to undergo a sequential test and, where appropriate, the Exception test, before deciding upon a preferred location. However, because minerals can only be worked where they are found, mineral operations are often, by necessity, located in areas at risk of flooding. For this reason, national policy<sup>170</sup> classifies minerals working and processing (except for sand and gravel working) as 'Less Vulnerable Development' and sand and gravel working as 'Water compatible development'. As a consequence, minerals development can, subject to appropriate design and management, be permitted within Flood Zones 1, 2 and 3a. Sand and gravel quarries are also appropriate in Flood Zone 3b.
- 11.92 Where appropriate, mineral operators should take the sequential approach into consideration when siting ancillary equipment or buildings, which may be vulnerable to flood risk even if the quarrying itself is water compatible, and the design of the phasing of working.
- 11.93 As set out in national policy<sup>171</sup>, the MPA will require applicants to produce an appropriate Site Specific Flood Risk Assessment to be undertaken for any development proposal where the following criteria apply:
- All development located within Flood Zones 2 or 3
  - Development proposals over 1 hectare in Flood zone 1;
  - Land which has been identified by the Environment Agency as having critical drainage problems;
  - Land identified in a strategic flood risk assessment (SFRA) as being at increased risk of future flood risk; or
  - land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use.
- 11.94 Further information regarding the content of site specific flood risk assessments is set out in PPG<sup>172</sup> and also on the Government website<sup>173</sup>.

171 Footnote 55, revised NPPF (July 2021) and [When you need an assessment](#)

172 Paragraph 001 onwards, reference id: 7-001-20140306 (March 2014)

173 [Flood risk assessments if you're applying for planning permission](#)

174 [Groundwater source protection zones \(SPZs\)](#)

- 11.95 In the Plan Area, a number of different bodies have responsibilities in terms of managing flood risk. The Environment Agency is responsible for managing the risk of flooding from main rivers and reservoirs and prepares national and regional flood risk guidance and strategies. Derbyshire County Council and Derby City Council also each have a statutory role as Lead Local Flood Authority (LLFA) for their respective administrative areas. LLFA are responsible for developing, maintaining and applying a strategy for local flood risk management in their areas and for maintaining a register of flood risk assets. They also have lead responsibility for managing the risk of flooding from surface water, groundwater and ordinary watercourses. When considering proposals for minerals development and minerals related development, the MPA recommends that applicants engage with these bodies at the earliest opportunity.
- 11.96 Mineral extraction within floodplains can temporarily reduce storage capacity, impede flows and therefore increase the risk of flooding elsewhere. Potential obstructions can include soil and overburden mounds and fixed plant. In addition, buildings and hard standing associated with minerals development can lead to an increase in surface run-off and therefore contribute to flooding. Careful site design at the planning application stage will be required to address potential flood issues. Where possible, buildings and other obstructions should be located in parts of the site a lower risk of flooding. Where appropriate, Sustainable Drainage Systems (SuDS) capable of storing and controlling the discharge of water should be incorporated into the design of proposals.
- 11.97 When assessing the impacts of minerals development and minerals related development on surface water discharges, the MPA will require applicants to consider both water quality and quantity issues. The primary aim when considering the design of SuDS should be to reduce surface water discharge by appropriate soakaways and other infiltration systems, followed by attenuating (i.e. holding back) high flows of water during heavy rainfall. Discharging (uncontaminated) water to suitable water courses or surface water sewers are both more sustainable than discharging to combined sewers.
- 11.98 The MPA will require development proposals to be accompanied by appropriate management and maintenance regimes for surface water drainage systems. On greenfield sites, applicants will be expected to demonstrate that the current natural discharge solution from a site is at least mimicked. On previously developed land, applicants should target a reduction of surface water discharge.
- 11.99 The restoration of mineral workings can also bring environmental benefits, including the minimisation of flood risk and enhancement of natural capital both within the site and its surrounding area. The MPA will expect restoration schemes to explore opportunities for delivering wider environmental benefits, including adapting to and mitigating the impacts of future flood risk through site restoration schemes. Appropriate landscaping of a site can also assist in reducing surface water discharge.

## Water Quality

- 11.100** Minerals and waste developments also have the potential to deplete or pollute surface waters as a result of mineral extraction below the watercourse, chemicals or waste contaminants, soil and silt carried in surface water run-off during construction activities, or erosion of river banks due to excess water run-off.
- 11.101** The Environment Agency is the main body responsible for maintaining water quality and resources in the UK and provides advice on the protection of surface and groundwater protection zones<sup>174</sup>. It also publishes information on groundwater vulnerability and the location of source protection zones for water supply. Groundwater Protection uses aquifer designations (reflecting the importance of aquifers in terms of groundwater as a resource and also their role in supporting surface water flows) which are consistent with the Water Framework Directive<sup>175</sup>. A key aim of the Water Framework Directive is to prevent deterioration in the status of water bodies, improve their ecological and chemical status and prevent further pollution.
- 11.102** The MPA will require all proposals for mineral development and minerals related development to satisfactorily assess potential impacts on the water environment during all phases (e.g. construction, operational and restoration) of the proposed development. Hydrological or, where required, hydrogeological assessments will be required to take account of likely impacts to surface water quality, quantity and flows and ground water quality and levels resulting from minerals development and minerals related development. Such impacts could result from operations such as de-watering operations, water discharge or through the inappropriate storage of fuels and other pollutants. Mineral workings below the water table could also result in adverse impacts. Assessments should also set out appropriate mitigation measures to ensure that minerals development and minerals related development would not adversely affect surface and ground waters.

## SOIL QUALITY AND AGRICULTURAL LAND

- 11.103** Minerals development and minerals related development often takes place on agricultural land and depending on the scale and nature of a proposal, can result in its damage or permanent loss through inappropriate restoration schemes and techniques. The movement, handling storage and mixing of soils (including topsoils, subsoils and overburden) to access underlying minerals can also lead to their damage or degradation if undertaken inappropriately or in the wrong conditions.

175 Groundwater in the Water Framework Directive

176 Paragraph 174, revised NPPF (July 2021)

**11.104 Proposals for minerals development and minerals related development will be supported where it can be demonstrated that they will protect and conserve soil resources and their quality and safeguard the long-term potential of best and most versatile agricultural land. Proposals should prioritise the retention of soil resources for reuse within the site.**

### REASONED JUSTIFICATION

- 11.105** Soil is a finite resource that is essential for growing food and other crops, supporting biodiversity, contributing to landscape character, storing water, capturing carbon as well as acting as buffer against pollution. It is also a natural capital asset that provides important ecosystem services. National policy requires the MPA to protect and enhance valued soils and prevent the adverse effects of unacceptable levels of pollution. It also requires the MPA to take into account the economic and other benefits of best and most versatile agricultural land<sup>176</sup>. Where significant development of agricultural land is demonstrated to be necessary, the MPA should seek to use of areas of poor quality land in preference to that of higher quality<sup>177</sup> to ensure that the long-term potential of ‘best and most versatile land’ is safeguarded for future generations.
- 11.106** The quality of agricultural land is classified by Defra and Natural England using the Agricultural Land Classification (ALC). The ALC system classifies land into five grades, with grade 3 subdivided into sub-grades 3a and 3b. The best and most versatile land is defined as Grades 1, 2 and 3a in the NPPF<sup>178</sup>. This is the land which is most flexible, productive and efficient in response to inputs and which can best deliver future crops for food and non-food uses such as biomass, fibres and pharmaceuticals.
- 11.107** The MPA will assess the impact of proposals for minerals development and minerals related development on soils, their intrinsic character and the sustainability of the many ecosystems they deliver. Where proposals involve the disturbance of soils, subsoils and overburden arisings, they will be expected to be accompanied by sufficient information to demonstrate that soil quality will be protected and maintained throughout the life of the development particularly during operations involving stripping, handling, storage, management and final placement.

177 Footnote 58, revised NPPF (July 2021)

178 Annex 2: Glossary, revised NPPF

179 Guide to assessing development proposals on agricultural land

- 11.108** Where proposals are located on best and most versatile agricultural land, the MPA will expect the planning application to include sufficient information, including an agricultural land assessment, to demonstrate that the development will prioritise the development of poorer-quality land, avoiding significant development of best and most versatile agricultural land unless it is demonstrated to be necessary; safeguard the long-term potential of best and most versatile agricultural land by enabling the land to retain its longer-term capability for agricultural use where practicable; and optimise the restoration of agricultural land quality where the proposed after-use returns sites to an agricultural after use so that the potential of the BMV land can be maintained.
- 11.109** Further guidance on soils and assessment of agricultural land is set out in PPG and on the Natural England website<sup>179</sup>. The Institute of Quarrying has also recently published revised good practice guidance on the handling of soils in mineral workings<sup>180</sup>.

## AVIATION SAFETY

- 11.110** Where minerals development and minerals related development is located close to an airport, one of the main hazards is bird strike, particularly where the site is restored to open water or wetland habitats. Tall buildings or structures located on mineral sites may also represent a hazard. It is important, therefore, that the development is designed carefully in order to maintain aviation safety.

## POLICY DM10: AVIATION SAFETY

**11.111 Minerals development and minerals related development within an airport safeguarding area will only be supported where it can be demonstrated that the development, including the form of restoration, would not constitute a significant hazard to aviation safety.**

**Restoration proposals for sites in these areas will be expected to balance the need to minimise the attractiveness of the site to birds that constitute a risk to aviation safety with other environmental considerations including climate change, landscape or biodiversity.**

**All proposals within an airport safeguarding area will be expected to operate in accordance with the provisions of an agreed Bird Hazard Management Plan.**

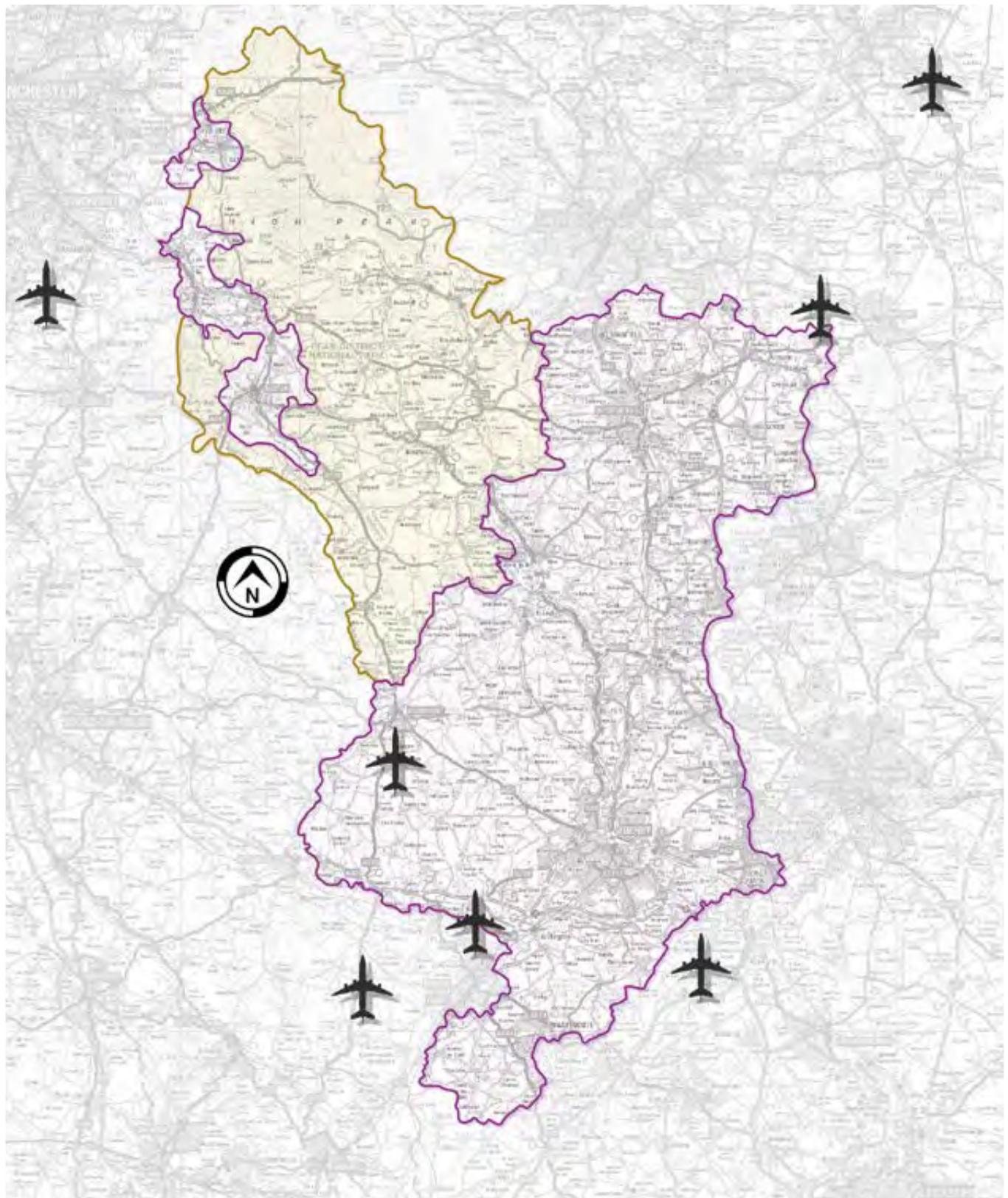
180 Good Practice Guide for Handling Soils in Mineral Workings

181 Paragraph 150, revised NPPF (July 2021)

## REASONED JUSTIFICATION

- 11.112** The Town and Country Planning (Safeguarding Aerodromes, Technical Sites and Military Explosives Storage Areas) Direction 2002 seeks to ensure that the operation and development of civil and military aerodromes and technical sites is not impeded through inappropriate development including buildings and structures that obscure runway approach or impede navigation aids or telecommunications systems; lighting with the potential to distract pilots; or development which has the potential to increase the number of birds/the bird hazard risk such as the restoration of mineral workings. National policy requires mineral working, restoration and after-use proposals to take account of aviation safety.
- 11.113** Where proposals for minerals development and minerals related development are located within 13km of officially safeguarded civil aerodromes, 8 miles of military aerodromes, delineated safeguard areas for (NATS) Technical Sites or within the identified safeguarding areas of other aerodromes, the MPA must consult the appropriate authority. In the event that proposals for mineral development or minerals related development results in unacceptable adverse impacts on aviation safety, planning permission should not be granted.
- 11.114** Open water and wetland-based restoration schemes for minerals sites have the potential to attract increased numbers of large flocking birds such as gulls and geese, which can increase the overall risk of bird strike to aircraft. Some species of birds associated with bird strike can also be found on agricultural land. Water-based restoration can be achieved without constituting an unacceptable risk to aviation safety, through the incorporation of measures such as the creation of reed beds or fragmented ponds, instead of open water, as these are generally less attractive to the flocking birds that present a bird strike hazard. It is important, therefore, that careful consideration be given to the restoration of mineral sites located in airport safeguarding areas. Schemes should aim to balance local landscape and biodiversity distinctiveness with the need to minimise the risk of bird strike.
- 11.115** The MPA will continue to work closely with airport authorities and other interested bodies to ensure that sites close to airports are designed and restored in ways which minimise the risk of bird strike. In the Plan area, the only officially safeguarded civil or military aerodrome is East Midlands Airport. Safeguarded NATS technical sites are also located in Derbyshire Dales. Other aerodromes in, or close to the Plan Area, that need to be taken into account include Derby Aerodrome at Egginton, Tatenhill aerodrome near Burton-on-Trent in Staffordshire and Netherthorpe Aerodrome near Worksop in Nottinghamshire. These are set out on Figure 11.1 below.

FIGURE 11.1: SAFEGUARDED AERODROMES



-  Plan Area
-  Peak District National Park Area
-  Airfields

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## GREEN BELT

11.116 Within the Plan Area, there are four areas of Green Belt – the Derby/Nottingham Green Belt, the North East Derbyshire Green Belt (also known as Sheffield/South Yorkshire Green Belt), the North West Derbyshire Green Belt and the South Derbyshire Green Belt. These are set out on Figure 2.1 in Chapter 2: Spatial Overview. As set out in the NPPF, the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open and its essential characteristics are its openness and permanence.

## POLICY DM11: GREEN BELT

**11.117 Proposals for minerals development and minerals related development will be supported where it can be demonstrated that they will maintain the openness of the Green Belt and the purposes of including land within it. Inappropriate development will not be approved except in very special circumstances. Very special circumstances will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.**

## REASONED JUSTIFICATION

11.118 Minerals can only be worked where they are found. Within the Plan Area, a range of minerals are found in the Green Belt including building stone, coal and hydrocarbons in the North East Derbyshire Green Belt, hydrocarbons and sand and gravel in the Nottingham-Derby Green Belt, brick clay and sandstone in the North West Derbyshire Green Belt. It is possible, therefore, that proposals for minerals development and minerals related development in the Green Belt will come forward during the plan period.

11.119 The NPPF<sup>181</sup> states that minerals extraction is not inappropriate in the Green Belt where this preserves its openness and does not conflict with the purposes of including land within it. Appropriately designed and restored mineral working is therefore capable of being accommodated with the Green Belt where this does not conflict with national policy.

- 11.120** All proposals will need to demonstrate that the location, scale and impacts of the development will not harm the openness of Green Belt or the purposes of including land within it. Such assessment should be proportionate to the nature, location, duration and size of the proposed development and any potential harm it may bring to the openness of the Green Belt. Consideration should be given to how all stages (construction, operation and restoration) of the proposal would affect the characteristics of the Green Belt and the purposes of including land within it; whether any part of the proposal would constitute inappropriate development in the Green Belt; and if, in the event that any part of the development would be inappropriate, what very special circumstances might exist to justify that development.
- 11.121** Very special circumstances will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations. Very special circumstances will need to be considered on a case-by-case basis and will depend on the circumstances of any proposed development. The presence of minerals - which can only be developed where they exist - and the contribution they can make to maintaining a steady and adequate supply, may be capable of being relevant considerations, depending on the circumstances at the time of any application.
- 11.122** Following mineral extraction, sites should be restored to a use compatible with Green Belt objectives and seek to enhance its appropriate use. This could include opportunities for biodiversity net gain, enhancement of ecological networks and natural capital, measures to enhance existing landscapes and visual amenity and to increase public access and opportunities for outdoor sport and recreation. Such opportunities will not negate the need to comply with protective Green Belt policy.

## GREEN INFRASTRUCTURE

- 11.123** Green infrastructure can be defined as a network of strategically planned multi-functional green and blue (water) spaces and other natural features, and the connections between them, that are capable of delivering, through appropriate design and management, a wide range of environmental, economic, health and wellbeing benefits for nature, climate, local and wider communities and prosperity. The green infrastructure network may comprise spaces in public or private ownership, with or without public access.
- 11.124** Green infrastructure is also a natural capital asset that provides multiple benefits at a range of scales. Natural capital refers to the elements of the natural environment (often referred to as 'natural assets') which provide benefits ('ecosystem services') to local communities. Maintaining and enhancing the resilience of natural assets is essential to community health and well-being at both the local and strategic level.

11.125 Whilst poorly planned and managed minerals and minerals related development has the potential to result in the loss or deterioration of green infrastructure through intensive and long-term environmental disturbance, well designed schemes also have the potential to contribute significantly to the extent and quality of local and strategic green infrastructure networks within the Plan Area and, through them, enhance its natural capital.

## POLICY DM12: GREEN INFRASTRUCTURE

**11.126 Proposals for minerals development and minerals related development will be supported where it can be demonstrated that they will not compromise the integrity of existing strategic and local green infrastructure assets or the natural capital of the Plan Area.**

**All proposals for minerals development and minerals related development will be expected to take account of, and provide opportunities to create, maintain and enhance green infrastructure provision in the Plan Area and, where possible, improve accessibility to these assets. Proposals should aim to incorporate a range of green infrastructure to maximise the delivery of multi-functionality and ecosystem services, support climate change adaptation and encourage healthy and active lifestyles. Where applicable, the MPA will expect the proposals to have regard to the content of existing green infrastructure strategies or other approved strategies promoting change at the landscape scale.**

**Where new green infrastructure assets are proposed details of the arrangements for the long-term management of the asset will need to be provided prior to the determination of any planning application. Where necessary, these matters may need to be secured using Planning Obligations.**

## REASONED JUSTIFICATION

11.127 National policy requires that strategic policies should set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for green infrastructure<sup>182</sup>. It also requires the MPA to take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries<sup>183</sup>.

183 Paragraph 175, revised NPPF (July 2021)

184 Paragraph 004, Reference ID 8-004-20190721 & Paragraph: 005 Reference ID: 8-005-20190721

11.128 PPG<sup>184</sup> outlines the types of land use that comprise green infrastructure and recognises the benefits (ecosystem services) that it can bring to local communities. The guidance identifies the following planning goals which green infrastructure can help achieve<sup>185</sup>:

- Building a strong, competitive economy;
- Achieving well-designed places;
- Promoting healthy and safe communities;
- Mitigating climate change, flooding and coastal change; and
- Conserving and enhancing the natural environment.

11.129 The extent to which green infrastructure is capable of providing these benefits is largely dependent on how well it is designed and maintained. Whilst individual assets can serve a useful purpose in isolation, direct connectivity between multiple green infrastructure assets can help maximise the benefits that they generate and reduce issues associated with fragmentation and severance. Policy DM12 seeks to establish a comprehensive and well managed network of green infrastructure assets for the Plan Area and, through them, enhance its natural capital.

11.130 Although there is no single overarching strategy, green infrastructure strategies have been adopted for parts of the Plan Area. The 6C's Green Infrastructure Strategy<sup>186</sup>, which takes in the counties of Leicestershire, Derbyshire and Nottinghamshire, is relevant to Derby City Council, Amber Valley Borough Council, South Derbyshire District Council and Erewash Borough Council. The Greater Nottingham Green and Blue Infrastructure Strategy includes the administrative area of Erewash Borough Council<sup>187</sup>. Green infrastructure studies have also been undertaken as part of local plan preparation by Derbyshire District Council, High Peak Brough Council and Chesterfield Borough Council. Derbyshire County Council is also currently building an evidence base to assist in the production of a Natural Capital Strategy which, it is hoped, will be adopted by 2023. The MPA will utilise the studies and adopted strategies when assessing the impact of development proposals on existing green infrastructure assets as well as any potential linkages to those assets.

185 Paragraph: 006 Reference ID: 8-006-20190721

186 6cs Green Infrastructure Strategy (July 2010)

187 Greater Nottingham Green and Blue Infrastructure Strategy Part 1 (July 2020)

188 Paragraph 100, Revised NPPF, July 2021

- 11.131** Proposals for mineral development and, where appropriate, mineral related development, will be expected to contribute to the extension or enhancement of the green infrastructure network in the Plan Area, helping to address deficiencies in existing provision and providing good quality connections to the network and throughout the development. The MPA will expect green infrastructure principles to be considered and incorporated into proposals for minerals development at the earliest possible opportunity. They should be considered at every scale (e.g. local or strategic) and be capable of delivering a wide range of environmental, health and quality of life benefits for local communities. Applicants should assess the site context for green infrastructure functions and take opportunities to achieve multi-functionality by bringing green infrastructure functions together.
- 11.132** In developing proposals for minerals development and minerals related development, the MPA will expect applicants to have regard to the content of existing green infrastructure strategies, or other strategies approved during the Plan period, promoting change at the landscape scale. These should be viewed and considered alongside other relevant policies of this Plan to identify opportunities for protecting, enhancing and connecting green infrastructure assets as part of new development.
- 11.133** Green infrastructure requires sustainable management and maintenance arrangements to be put in place if it is to provide benefits and services in the long term and ensure operations deliver biodiversity net gains. The protection, enhancement and creation of green infrastructure should be considered at an early stage of a mineral development proposal. Planning conditions and planning obligations will be required to secure and fund new and existing green infrastructure assets both on site and, if necessary, offsite.

## PUBLIC ACCESS

- 11.134** Minerals development and minerals related development can have significant direct or indirect impacts on public rights of way, open spaces and informal outdoor recreational land and their users. Public access to such routes and areas may be restricted for health and safety reasons or to prevent criminal damage. Where rights of way are affected, arrangements for their temporary or permanent diversion must be put in place as part of proposals. Restoration of mineral workings may provide an opportunity to provide new or enhanced rights of way and outdoor recreational uses.

**11.135 Proposals for minerals development and minerals related development will be supported where it can be demonstrated that they will not have an unacceptable impact on the existing rights of way network and its users. Where this is not practicable, satisfactory proposals for temporary or permanent diversions, which are of at least an equivalent convenience, quality or interest must be provided.**

**Improvements and enhancements to the rights of way network will be sought and, where possible, public access to restored minerals workings will be increased. Opportunities will be taken for the provision of new routes and links between existing routes, especially at the restoration stage with priority given to meeting the objectives of any adopted Rights of Way Improvement Plans covering the Plan Area as well as any adopted strategies for greenways and/or cycle networks. Where necessary, these matters may need to be secured using Planning Obligations.**

### REASONED JUSTIFICATION

**11.136** National policy<sup>188</sup> states that policies should protect and enhance public rights of way and access. Opportunities to provide better facilities for users, such as adding links to the existing rights of way, should be sought. Where appropriate, manned crossing points will be required to ensure that the existing rights of way network is not compromised during development. Proposals for new rights of way will need to consider how they can best link into the existing rights of way network. All proposals for new or improved rights of way will also need to consider the needs of people with mobility problems and other disabilities and comply with the requirements of the Equality Act 2010.

**11.137** The Plan Area has a diverse network of footpaths, bridleways and byways which, when combined, provides approximately 3,000 miles of routes. Combined with the many other paths, trails, greenways and areas of open access land, this unique resource is an important tourism and recreation asset offering local communities and visitors the opportunity to explore the countryside as well as providing a sustainable means of access to schools, shops, work places and other community facilities. Despite this, parts of the Plan Area also suffer from a poor-quality environment, or a lack of publicly accessible green space. Therefore, efforts to improve public rights of way and access within, or as part of the restoration of, mineral developments should be targeted to help address existing shortfalls as well as providing new infrastructure.

- 11.138** When designing restoration schemes incorporating enhanced public access, new rights of way or new links between existing rights of way/multi-user routes, reference should be made, where appropriate, to the objectives of the appropriate Rights of Way Improvement Plan (RoWIP) or adopted greenway strategies. Within the Plan Area there are two RoWIP which should be taken into account - the Rights of Way Improvement Plan for the City of Derby 2014-2017 and the Rights of Way Improvement Plan for Derbyshire 2007 – 2012, both of which are still relevant. The County Council also produced a Statement of Action to accompany the RoWIP covering the period 2013-2017. Derbyshire County Council has also produced the Derbyshire Cycling Plan 2016-2030 covering the entire Plan Area, which sets out key priorities for strategic and local cycle routes within Derby and Derbyshire.
- 11.139** Advice should be sought from the MPA's rights of way officers regarding the need for temporary or permanent diversions associated with a development proposal at the earliest possible stage. The statutory process for footpath diversion or closure is separate from the planning process and as such delays or failures to secure any required amendments to the rights of way network could affect the implementation of future minerals development.
- 11.140** Enhancements to the rights of way network will be secured through planning obligations rather than planning conditions to ensure that the enhanced rights of way are available in perpetuity. Similarly, permissive paths (paths created as part of a restoration scheme which have no legal status as a right of way) will not be considered for temporary or permanent diversions to an existing definitive right of way.

## CUMULATIVE IMPACTS

- 11.141** Dependant on the type of mineral, the scale and nature of the mineral working and the abundance of the resource, the effects of minerals development and minerals related development on the environment, local communities and the surrounding area can last for many years. Within the Plan Area, this has resulted in some areas experiencing a concentration of workings, both historic and current, the effects of which continue to be felt today. The cumulative impact of several mineral workings either on one site or in close proximity to each other may, therefore, be a factor that needs to be considered; as well as the effects of these types of developments in conjunction with other developments in an area.

**11.142 Proposals for minerals development and minerals related development will be supported where it can be demonstrated, taking into account the potential sensitivity of the site, that there are no unacceptable cumulative impacts on the wider and local environment including landscape character, the local amenity of nearby communities including health and well-being and the economic prosperity of the local and wider area.**

**In assessing cumulative impacts, all proposals will be expected to have regard to both the collective effects of different impacts generated by that proposal (intra-project effects) as well as the effects of other developments occurring concurrently or successively (inter-project effects).**

## REASONED JUSTIFICATION

**11.143** The NPPF requires new development to be appropriate for its location, ‘...taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site, or the wider area to impacts that could arise from the development’<sup>189</sup>. Specifically with regard to minerals development, it requires local policies to ‘set out criteria or requirements to ensure that permitted and proposed operations do not have unacceptable adverse impacts on the natural and historic environment or human health, taking into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality’<sup>190</sup>.

**11.144** PPG<sup>191</sup> acknowledges that some parts of a MPA area may have been subjected to successive mineral development over a number of years, stating that MPAs should include appropriate policies in their minerals local plan to ensure that the cumulative impact of a proposed minerals development on the community and environment will be acceptable.

**11.145** Cumulative impacts associated with minerals development and minerals related development can occur in a number of ways including the cumulative impact of a number of environmental effects (e.g. noise, dust, vibration, odour, lighting, transport movements) associated with a single site; the combined effects from more than one site that are active simultaneously; the combined effect on local land use, landscape character and biodiversity following the restoration of mineral workings leading to a long term change in the characteristics and distinctiveness of an area; and impacts on the amenity of local communities who have experienced many years of either continual mineral extraction or the adverse effects resulting from poorly restored or unrestored mineral workings.

190 Paragraph 210(f), revised NPPF, (July 2021)

191 Paragraph 017 ID: 27-017-20140306, PPG

192 Paragraph 210(h) revised NPPF, (July 2021)

- 11.146 The MPA will consider the appropriateness of granting permission for new minerals development and minerals related development where they are located in close proximity to other minerals sites or where the legacy of historic mineral working remains having regard to both the collective effects of different impacts generated by that proposal (intra-project effects) as well as the effects of other developments occurring concurrently or successively (inter-project effects).
- 11.147 The ability of a local area to absorb further minerals development and minerals related development will be dependent on the location of existing mineral sites as well as pressures from other, non-mineral type development; the scale and nature (including phasing and duration) of the operations proposed; and the proposed restoration and after-use of the site and will be assessed by the MPA on a case-by-case basis.

## RESTORATION, AFTERCARE AND AFTER-USE

- 11.148 Minerals development is a temporary use of the land and, as a consequence, it is important that site restoration is properly designed at the earliest stage to ensure that proposals are achievable, environmentally acceptable and that long-term benefits are secured. Satisfactory restoration of minerals sites is also essential in ensuring the sustainable use of land following the completion of minerals development. The after-use of a site should be designed on a case by case basis, dependant on location, geology and local characteristics, as should the aftercare arrangements

## POLICY DM15: RESTORATION, AFTERCARE AND AFTER-USE

**11.149 Proposals for minerals development and minerals related development will be supported where it can be demonstrated that provision has been made for the reclamation of the site at the earliest opportunity to result in high quality restoration, aftercare and the appropriate after-use of the site.**

**All restoration proposals will be expected to deliver significant biodiversity net gain, contribute towards the enhancement of natural capital within the Plan Area and assist in mitigating the effects of climate change through the inclusion of appropriate climate change adaptation and mitigation measures.**

### **Restoration**

**As a minimum, all restoration proposals will be required to demonstrate the following:**

- 1) that the scheme has had regard to the character and distinctiveness of the surrounding landscape and historic environment, its biodiversity and geodiversity and existing land uses.**

Continues on next page

- 2) a restoration masterplan, including details of final landform, the drainage system and landscaping (including the retention of any existing, important landscape features) and a timescale for restoration works, including phasing.
- 3) that restoration material placement has been carefully planned to avoid sterilisation of the mineral resource, minimise double handling of material where possible, or lead to the imposition of artificial constraints to restoration;
- 4) where restoration will involve the use of imported materials to achieve the intended ground levels, that sufficient infill materials are likely to be available to restore the site within an acceptable timescale; provide the optimum restoration solution, using no more material than necessary to attain the required landform;
- 5) that, wherever possible, it seeks to maximise all opportunities for phased or progressive restoration and how this is to be achieved;
- 6) how the proposal makes provision for the appropriate retention or replacement of soils and, where agricultural restoration is proposed, how the scheme will retain, enhance and/or replace areas of the best and most versatile agricultural land;
- 7) where sites lie within an Airport Safeguarding Zone, how the scheme has been designed to minimise the issue of bird strike.

#### **Aftercare**

All proposals will be subject to a minimum five-year period of aftercare. Where proposals, or elements of proposals e.g. habitat creation, require a longer period of management a proposal will only be supported where it clearly sets out details of the period of extended aftercare and how this will be managed and secured. Where these cannot be secured through planning condition, the MPA will seek to secure them via planning obligation.

#### **After-use**

Proposals should seek to provide benefits to the local and wider community including enhanced natural capital, enhancement and creation of biodiversity and geodiversity interests, linkages to other green infrastructure initiatives and ecosystems, enhanced landscape character, improved public access, recreation or tourism opportunities.

## REASONED JUSTIFICATION

- 11.150** National policy<sup>192</sup> requires that land worked for minerals is reclaimed at the earliest opportunity, taking account of aviation safety, and that high-quality restoration and aftercare of mineral sites takes place.
- 11.151** PPG<sup>193</sup> advises that the most appropriate form of site restoration to facilitate different potential after-uses should be addressed in firstly both local minerals plans, which should include policies to ensure that worked land is reclaimed at the earliest opportunity and that high quality restoration and aftercare of mineral sites takes place, and secondly on a site-by-site basis following discussions between the minerals operator and the MPA. It goes on to set out<sup>194</sup> the key stages involved in the restoration and aftercare of minerals sites and describe the level of detail that should be submitted regarding restoration and aftercare at the planning application stage.
- 11.152** Well considered restoration proposals should have regard to the wider context of the site, to ensure that the restored site integrates with the character and distinctiveness of the surrounding landscape, mitigates any visual intrusion, and enhances biodiversity. Well-designed restoration schemes can also play a key part in building and enhancing natural capital and ecological networks at both the site level and at the more strategic level and establish the long-term potential of the land for a wide range of after-uses, such as conservation, recreation, flood alleviation and improved access, that can be of benefit to local communities and the economy. The MPA will expect all proposals to contribute, where appropriate, to the creation of new green infrastructure and opportunities for increased public accessibility in the Plan Area in accordance with policies DM12: Green Infrastructure and DM13: Public Access,
- 11.153** All restoration schemes should include landscaping proposals, which ensure that sites can be assimilated into the surrounding landscape and which are compatible with the proposed after-use. These should be based on the local landscape character of the site and its surroundings. When designing landscaping schemes, applicants should have regard to the ‘Landscape Character of Derbyshire’ document or other local town/landscape character assessment relevant to the Plan Area. The MPA will expect all restoration schemes to have regard to the requirements of policy DM4: Landscape.

193 Paragraph 37 PPG, (Reference ID:27-037-20140306), 06 03 2014

194 Paragraph 38, PPG Minerals 2014, Reference ID: 27-038-20140306 revision date 06 03 2014

195 PPG Minerals March 2014 Paragraph: 048 Reference ID: 27-048-20140306

- 11.154** At the planning application stage, applicants will be required to demonstrate that the site can be restored to an acceptable condition and after-use. A restoration and after-use scheme, which is integrated fully with the extraction programme from the start of the process, will be expected to be submitted as part of the planning application for the working of the site. This should provide comprehensive details of the order and timing of phases of mineral working, restoration and of the final main after-uses. The scheme should also aim to integrate and facilitate the delivery of any relevant mitigation measures, as identified in assessments undertaken to support the planning application. It is strongly advised that these matters are discussed with the MPA at the pre-application stage, and where possible involve input from relevant key stakeholders to resolve any potential conflicts of interest.
- 11.155** At sites where there is a high volume of mineral extraction, it may not be possible to restore the land to pre-extraction levels without the use of imported materials. The ability to restore land to original ground levels will impact on the options for site restoration, particularly where restoration to agricultural use is the preferred option.
- 11.156** Inert infill material, such as construction material (builders' rubble and soils from ground excavations) has commonly been used to restore land to the required level, although this type of material is becoming increasingly scarce as a consequence of greater incentives to recycle materials and since the introduction of Landfill tax. The location of some sites also means that the delivery of infill material by road may not be possible or could result in further and unacceptable adverse impacts. The MPA will expect potential or limitations on the ability to restore ground levels to be addressed in the planning application documents and be taken into consideration in the design of the development at the earliest opportunity. Mineral operators should be able to demonstrate that sufficient infill material is likely to be available and within an acceptable period to avoid delays in restoration.
- 11.157** Whilst mineral extraction may be considered appropriate in a particular location, the use of waste material as a restoration/infill material may not be. This could be because of site location e.g. a site in the Green belt or the proximity of local communities. Where an operator proposes to import waste material for infilling purposes, an Environmental Permit from the Environment Agency will be required. National policy seeks to ensure that recyclable materials are put to beneficial use ('waste recovery') rather than being disposed of ('waste disposal'). Operators will also need to ensure that restoration schemes involving the use of waste materials are designed to keep waste materials to a minimum to ensure the restoration phase is kept to a minimum, that restoration is the optimum solution for the site and that no more material than necessary is used to achieve the required landform.

- 11.158** Wherever possible, site restoration must be undertaken progressively, with sections of the site worked and then restored at the earliest opportunity. The aim should be to minimise the area of land disturbed and the overall period of mineral operations. Progressive restoration can also assist in gauging the success/rate of establishment of approved planting schemes as well as any habitat creation measures. It can also help to offset any impacts of the development on biodiversity, the landscape and visual amenity, as well as helping to maintain and enhance local distinctiveness during the life of the development.
- 11.159** The MPA will expect soils to be adequately protected and maintained throughout the life of the development, particularly if a site comprises land that qualifies as best and most versatile agricultural land (see Policy DM9: Soil quality and Agricultural land).
- 11.160** Where sites are located in airport safeguarding zones, the MPA will expect restoration schemes to be designed to incorporate appropriate bird hazard management measures in order to minimise impacts to aviation safety in accordance with Policy DM10: Aviation safety.
- 11.161** In order to ensure that a restored site is fit for purpose and remains so, it is important that they are properly managed afterwards. Aftercare can include the processes of cultivating, fertilising, planting, draining and otherwise treating the land. An appropriate period of aftercare is needed to ensure mineral sites are restored to a standard suitable for their intended after-use. The length of the aftercare period will normally be at least five years, although this can be extended, and will be negotiated on a case-by-case basis, depending on the restoration scheme and after-uses agreed for the site. Where appropriate, the MPA will seek to ensure that the long-term management of the site is secured through a Planning Obligation.
- 11.162** National policy<sup>195</sup> requires that financial guarantees are only provided in exceptional circumstances such as mineral extraction techniques utilising new technologies. Large mineral operators tend to be members of trade associations such as the Mineral Products Association which have their own Restoration Guarantee Fund (although this is limited to £1 million). However, for a variety of reasons, many large mineral operators are concentrating their resources on larger sites. They are also selling or transferring smaller sites to smaller operators towards the end of the extraction phase or during the restoration phase. For these reasons, it is important to ensure that the developers or land owners left in control of the sites have adequate financial provision to fulfil the final restoration and aftercare requirements. This can be through membership of a trade association with an adequate Restoration Guarantee Fund or by providing an equivalent guarantee bond.

## PLANNING OBLIGATIONS

**11.163** In order to ensure that all minerals development and minerals related development meets the sustainable development objectives of the Plan, additional measures may be required to make a proposed development acceptable. Such measures may be identified in the information submitted in support of planning applications or through consultee comments during the determination of those applications. Where issues can be addressed satisfactorily by imposing a planning condition the MPA will seek to use planning conditions in the first instance. Circumstances can exist where this may not be possible and, where this occurs, the MPA will seek to enter into a planning obligation in order to secure the necessary mitigation measures.

## POLICY DM16: PLANNING OBLIGATIONS

**11.164 The Mineral Planning Authority will seek to negotiate planning obligations as measures for controlling minerals development and minerals related development to secure sustainable development objectives which cannot be achieved through the use of planning conditions.**

## REASONED JUSTIFICATION

**11.165** Section 106 of the Town and Country Planning Act 1990, as amended allows Mineral Planning Authorities to enter into private agreements (otherwise referred to as planning obligations) with landowners and developers in order to make acceptable development that would otherwise be unacceptable. Such obligations apply to all those parties that enter into the agreement as well as any subsequent owner of the land to which the planning permission relates. Developers can also make unilateral undertakings to commit to certain actions.

**11.166** Government policy on the use of planning obligations is set out in the NPPF. Planning legislation<sup>196</sup> also sets out limitations on the use of planning obligations. There are three tests that all planning obligations must meet in order to constitute a reason to grant planning permission. They must be:

- Necessary to make the proposed development acceptable in planning terms;
- Directly related to the proposed development; and
- Fairly and reasonably related in scale and kind to the proposed development.

**11.167** In the context of minerals development and minerals related development, planning obligations may be sought in a number of circumstances. Although not intended to be definitive, such circumstances can include:

- The provision of off-site works such as highway improvements and flood alleviation measures in order to mitigate the impacts of the development;
- Contributions towards the delivery of identified infrastructure proposals of other adopted landscape scale strategies;
- The provision of long-term site management/aftercare following restoration in order to ensure that the aftercare objectives are fully realised (where third parties are involved); and
- Securing and ensuring the delivery of biodiversity net gain or carbon offsetting particularly where it is proposed that this be achieved via ex-situ compensation or payments are made to third parties.

**11.168** The precise nature and scale of planning obligations will vary with each development. Commonly they are based on:

- The nature of the impacts that the development has on existing infrastructure and whether it is capable of being accommodated by existing provision;
- Any site/development specific mitigation measures required and the means of implementing them.

**11.169** Applicants are encouraged to discuss the need for planning obligations at the earliest possible opportunity. Pre-application discussions can prevent delays in finalising those planning applications which are granted subject to the completion of planning obligation agreements.

## OTHER MINERAL RELATED ISSUES

**11.170** In setting out policies for non-strategic matters the NPPF<sup>197</sup> requires local plans to include detailed policies for, amongst other things, types of development<sup>198</sup>. The following policies cover general mineral related issues.

198 Paragraph 28, NPPF, July 2021

199 Section 35

## BORROW PITS

- 11.171** Borrow pit is the term used to describe temporary mineral extraction which is used in association with a specific major building or engineering project, such as the construction of a new road, railway, or reservoir. Borrow pits are used solely to supply mineral based construction materials for these projects. They normally involve the excavation of large quantities of material over a short period from a site lying adjacent or very close to the development site. Typically, the materials are used to provide bulk fill, but they can also be used for specialist purposes, for example, the supply of clay with particular qualities for placement around bridge supports over water courses. Past examples, in the Plan area, include the borrow pits used in connection with the construction of the A50 Stoke-Derby link between the M1 motorway and Doveridge.
- 11.172** Borrow pits can have a number of advantages over established quarries. Major construction projects such as road schemes are normally intensive developments and require large quantities of material over a relatively short period. For a developer, the use of a borrow pit operated under their control can ensure the availability of the material that is required in the right quantities and the right times to serve the needs of the construction project. In contrast, an established quarry may have a number of existing supply contracts and may not be able to guarantee delivery in the volumes which are required, especially if the quarry output is limited and controlled by the terms of the planning permission. Additionally, the void created by the mineral extraction can sometimes be used to dispose of surplus excavation materials from the construction site and the land restored at a much shorter timescale than at a conventional quarry. Furthermore, sourcing the material from an adjacent site reduces the volume of traffic on public roads and the associated impacts that can have. Minerals won from borrow pits contribute towards the Plan area's aggregate requirements and may help to conserve reserves at established quarries by ensuring that the construction project uses minerals of an appropriate quality.
- 11.173** Planning permission is required for all borrow pits apart from smaller ones which are developed within the boundary of construction sites, including highways and railways. Proposals for borrow pits will be considered in the same way as other mineral development and therefore they must be justified in terms of being the most sustainable way of supplying mineral to meet demand, taking into account appropriate socio-environmental safeguards covering both working and restoration.
- 11.174** The need for and the supply of borrow pits can only be established on an individual construction project basis and where borrow pits are proposed information should be provided to demonstrate the relationship between the proposal and the specific project to be served. It is particularly important to plan early for borrow pit development in order that it can be developed in the timescales required for each project. Borrow pits should not be used to serve the wider market for minerals.

**11.175** The main impacts associated with borrow pits is that they usually involve greenfield sites and may lie in semi-urban areas where mineral working would not normally be acceptable. It is an important principle, therefore, that proposals for borrow pit development provide significant benefits that offset any adverse impacts of mineral extraction in such locations. They should also set out a clear and acceptable method of operation with appropriate mitigation measures and provide for an appropriate form of restoration. Policy DM17 covers only those matters that relate specifically to the extraction of minerals by borrow pit; all other policies of the Plan apply to borrow pit development where relevant.

## POLICY DM17 BORROW PITS

**11.176 Proposals for borrow pits associated with specific construction projects will be supported where:**

- 1) The site is adjacent to or sufficiently close to the project so that the material can be conveyed to or from the site without using the public highway;**
- 2) The material extracted will only be used in connection with the project or will be used to receive material from the project;**
- 3) It can be demonstrated that the supply of material from the borrow pit could not be obtained from other permitted sites nearby or would provide significant net economic, social and environmental benefits than if it were supplied from an existing source;**
- 4) The borrow pit can be restored to an appropriate after use, at the earliest opportunity, without the use of imported material, other than that generated from the construction project; and**
- 5) The use of the borrow pit is limited to the life of the project.**

## REASONED JUSTIFICATION

**11.177** Borrow pits provide a way of contributing to the sustainable supply of minerals for specific construction projects. The issue of borrow pits is not addressed explicitly in the NPPF or PPG; borrow pits however, are a form of mineral development and the guidance in these documents relating to the need to maintain the supply of minerals whilst protecting the environment and local amenity applies to these developments.

**11.178** Policy DM17 allows for the working of borrow pits subject to proposals meeting strict criteria relating to their location, the use of the mineral, the need for the mineral, restoration of the site and duration of the operation. In considering need the quantities and specifications of materials required for the construction project will be assessed, by the MPA, in the context of the level and location of existing permitted reserves. In general, it should usually be possible to meet requirements from local established quarries or from secondary/recycled aggregates. In such circumstances, borrow pits can normally only be justified where they offer clear net sustainability benefits over alternative existing sources of supply. The MPA will take into account such benefits, for example, where borrow pits are adjacent to construction sites, the most obvious benefit will be the avoidance of heavy good vehicles on the road network. There may also be economic and energy savings because of reduced haulage costs. These factors may also provide benefits for reducing carbon emissions in the context of climate change. Sites will need to be restored to an appropriate after use which may include using waste material from the construction project. The use of the mineral and the duration of proposed operation will be strictly controlled in relation to the construction project.

## REWORKING OF FORMER COLLIERY AND OTHER SPOIL TIPS

**11.179** The Plan area contains a number of historic spoil tips associated with former collieries and other large-scale manufacturing and heavy engineering industries. The processing plant used at collieries in the 20th Century were generally inefficient by modern standards and resulted in substantial quantities of coal being deposited in the spoil tips along with other discarded materials. Some of the tips also contain other materials which were previously regarded as waste (for example red shale) but are now in demand. Advances in processing technology now make it possible to recover the coal and other minerals from these tips, although the viability varies in accordance with the price and the quantity available. Proposals usually involve the re-tipping of waste material within the original tipping area. The recent reworking of one of the former spoil tips at the St Gobain site (formerly the Stanton and Staveley works) to the south of Ilkeston is a recent example of this form of development within the Plan area. Tarmac are also reworking tipped material at Hindlow Quarry.

**11.180** The reworking of colliery and other spoil tips has a number of benefits. It supports the important sustainability principle of re-using waste material to supply minerals which assists in reducing the need for coal and other minerals to be obtained from new sites, thus retaining primary minerals for use in the longer-term. It could extend the life of established quarries and even avoid or delay the need for additional extraction sites. Furthermore, the reworking of former spoil tips has the potential to facilitate the improvement of those sites that did not benefit from a high standard of reclamation at the time and which detract from the environment and local amenity of an area.

- 11.181** However, whilst the reworking of former spoil tips may represent a small-scale development compared to traditional mineral extraction sites, the operations can involve substantial engineering works requiring the use of large machinery and other plant such as screening and washing equipment. They may also seek to operate over a 24-hour period to make the operation economically viable. These activities therefore have the potential to generate a range of adverse socio-environmental impacts including visual intrusion, HGV movements, noise and dust similar to those for more regular mineral extraction sites. The impacts of obtaining the mineral by such development needs to be weighed against the benefits, which could include opportunities for landscape or habitat enhancement particularly where sites have not benefited previously from effective restoration schemes.
- 11.182** A further consideration is that in recent years, many of the older spoil tips have been well restored and are now an established feature of the landscape. Re-working of these tips could negate the benefits derived from the earlier restoration programme and this would need to be taken into consideration in the overall assessment of benefits. Policy DM18 covers only those matters that specifically relate to the extraction of minerals from former colliery and other spoil tips; all other policies of the Plan apply to this type of development where relevant. Spoil tips can also be re-worked to produce secondary and recycled aggregates. Proposals that fall within this category will be assessed against Policy SP3 the supply of recycled and secondary aggregates and all other policies of the Plan where relevant.

## POLICY DM18 REWORKING OF FORMER COLLIERY AND OTHER SPOIL TIPS

**11.183 Proposals for the extraction of coal and other minerals previously deposited minerals in colliery and other spoil tips will be supported where:**

- 1) It can be demonstrated that the development would provide significant net economic, social and environmental benefits; and**
- 2) They would not adversely affect any previous restoration that has been carried out on the site, or, if so, they would result in further, significant improvements to the previous restoration scheme.**

## REASONED JUSTIFICATION

- 11.184** The NPPF and PPG do not specifically address the issue of the reworking former colliery and other types of spoil tips directly, but do advocate the sustainable and prudent use of mineral resources and highlight the advantages of using secondary materials in preference to the extraction of primary materials.

- 11.185** The reworking of former colliery and other spoil tips are, in principle, similar to other types of mineral development and mineral related development and the guidance of these documents relating to the need to maintain the supply of minerals to support economic growth and provide for the needs of society whilst protecting the environment and local amenity applies to these developments.
- 11.186** The reworking of former colliery and other spoil tips is a way of contributing to the sustainable supply of minerals by reusing waste sources. Policy DM18 allows for the working of minerals from former coal and other spoil tips where the economic, social and environmental benefits of the proposal, including any environmental improvements to the site outweigh the socio-environmental impacts of the development. In assessing the benefits of the development, the MPA will take into account any adverse impacts on previous restoration schemes and proposals will be expected to negate such impacts by providing further significant improvements to previous restoration schemes.

## INCIDENTAL AND PRIOR WORKING OF CLAY

- 11.187** Clays are amongst the most widespread sedimentary rocks present throughout the Plan area. Policies to enable the working of Brick Clay and Fireclay are set out at Chapters 7.3 and 8.1 however other types of clay, although of less importance can be of commercial value for use in engineering applications e.g. clay linings. This section is about the working of such deposits where they are found in association with other primary minerals such as sand and gravel and some crushed rock types. It also covers the prior extraction of such clay to enable the commencement of another approved development. Chapter 9.1 safeguards minerals of national and local importance, including Brick Clay and Fireclay from sterilisation by non-mineral development. It also includes a policy to enable their prior extraction.
- 11.188** In some mineral workings the primary mineral occurs alongside clay deposits which need to be removed to access that primary target mineral. Similarly, clay deposits may lie on sites that are being redeveloped for non-mineral development. Where such clay deposits are of commercial value it may be justifiable for them to be extracted and used off site or even used on-site. In principle, recovering minerals as an incidental element to the working of another mineral or prior to or part of a non-mineral development proposal promotes sustainable development by helping to use mineral resources that might otherwise be lost.
- 11.189** It is important that extracting and removing incidental clay off-site would not significantly increase the overall environmental impacts of extracting the primary mineral especially in relation to any impacts on the restoration of the site. Clay materials are often retained on site and replaced in worked out areas to provide a satisfactory final landform. Incidental clay working could lead to additional visual, noise and dust impacts and increased HGV traffic from the site.

11.190 Similarly, where clay is removed prior to the development of a site for non-mineral development it is important to consider any additional adverse impacts from extracting the clay over and above those from the implementation of the approved development. It is necessary, therefore, to consider the location, scale, nature of such adverse impacts against the benefits of the mineral obtained. Prior extraction could also lead to additional visual, noise and dust impacts and increased HGV traffic from the site.

## POLICY DM19 THE INCIDENTAL AND PRIOR WORKING OF CLAY

**11.191 Proposals for the extraction of clay will be supported where they:**

- 1) Involve the incidental extraction of clay in association with the production of other minerals and where the extraction would help to ensure the most sustainable use of resources and would not significantly increase any adverse environmental or local amenity impacts associated with the primary working, or the subsequent restoration and after use of the site; or**
- 2) Involve the prior extraction of clay in advance of non-mineral development and where the extraction, would avoid the permanent long-term sterilisation of the clay resource and would not significantly increase any adverse environmental or local amenity impacts associated with the proposed non-mineral development.**

## REASONED JUSTIFICATION

11.192 The NPPF requires that, when preparing local plans, local planning authorities should include policies to provide for the extraction of minerals of national and local importance and to make the best use of them to ensure their long-term conservation. It also requires local plans to 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. In turn, it also provides guidance on the issues that mineral planning authorities should take into account when determining mineral development proposals.

11.193 The incidental and prior working of clay is a way of contributing to the sustainable supply of minerals by using minerals that might be sterilised or left unworked. Policy DM19 allows for the incidental working of clay in association with other minerals provided that extracting and removing the incidental clay off-site would not significantly increase the overall environmental and local amenity impacts compared with extracting the primary mineral, including any impacts on the reclamation and after use of the site. The policy also allows for the prior extraction of clay in advance of non-mineral development in order to avoid the long term sterilisation of the clay resource and provided that the proposal would not significantly increase any adverse environmental or local amenity impacts associated with the proposed non-mineral development.

**11.194** Proposals for the incidental working of clay alongside other minerals will be determined by the MPA. Where clay is worked prior to non-mineral development, whether a separate planning application will need to be made for mineral extraction to the MPA or whether the extraction will be considered as part of the non-mineral development, to be determined by the relevant City/Borough/District Council, will be decided on a case by case basis. The prior extraction of clay is not precisely defined in terms of quantity of mineral worked or duration. It does not, however, apply to mineral development simply because it is small scale or short term. If mineral extraction is a significant reason for justifying or promoting the development, the proposal will need to be assessed against the relevant policies applicable to the mineral being worked.

## MINERAL RELATED DEVELOPMENT

**11.195** Quarries and mines usually need ancillary mineral related development close by, such as plant machinery and buildings, for the treatment, preparation and use of minerals produced at the site. Examples include plant to crush, and screen raw mineral to a specified size or to wash raw mineral to remove impurities, and bagging plants to weigh and bag the raw mineral ready for export. In addition to ancillary development directly associated with the working of the mineral, there are often a number of 'industrial type' plants associated with the use of the mineral such as ready-mix concrete plants, concrete products and asphalt plants. At quarries which extract 'industrial limestone' additional development, such as cement and lime kilns, milling and powders plants may also be present.

**11.196** This Chapter sets out at 11.8 that not all ancillary mineral related development requires a formal planning application for planning permission. These types of development are commonly referred to as permitted development. Other forms of ancillary mineral related development do require planning permission. For some mineral extraction sites, particularly those of a limited duration, the range of ancillary equipment may have been identified in the original planning application and the use would be included in the planning permission. Some of the quarries in the Plan area, however, are substantial in size and will continue to operate for many years. The need for ancillary development at these quarries will vary over time and may involve the installation of new or replacement plant on different locations within the quarry.

**11.197** There a number of operational reasons why it is advantageous to co-locate ancillary mineral related development with the main mineral extraction operation. Additionally, it can reduce overall transport requirements and concentrate development on one site rather than a number of separate sites. However the siting of additional plant, buildings and machinery (sometimes substantial in scale) usually in countryside locations can generate adverse socio-environmental impacts, for example, in terms of visual intrusion, noise, dust and traffic generation, which can be particularly detrimental where the extraction site is not well related to the highway network.

- 11.198** A further consideration is that some types of mineral related development is not constrained to a particular location in the way minerals extraction is and, in some instances, plant of this type may be in ‘freestanding’ locations, such as on industrial or employment land. In some cases, this can represent a more sustainable approach, particularly where a wide range of minerals or other raw materials, not available at the primary quarry site, are required as part of the process. Such sites may be better located in terms of transport networks and key markets for the products.
- 11.199** Where mineral related development is to be sited at a quarry or mine, it is important that the siting of such development in what would normally be a countryside location can be justified any that any benefits of co-location are not outweighed by environmental and local amenity impacts. Where such development is located in the ‘green belt’ it will need to satisfy Development Management Policy DM11. Where mineral related development is justified it should be time limited to coincide with the cessation of mineral extraction at the associated site.

## POLICY DM20 MINERAL RELATED DEVELOPMENT

- 11.200** **Proposals for mineral related development will be supported where they demonstrate the need for a close link between the mineral related development and the mineral extraction and provided that they;**
- 1) would not have significant adverse environmental and local amenity impacts;**
  - 2) would not unacceptably increase the overall amount of road transport to the mineral site; and**
  - 3) are linked to the overall life of associated minerals extraction.**

## REASONED JUSTIFICATION

- 11.201** The issue of mineral related development is not addressed explicitly in the NPPF or PPG. Both, however, provide policy and guidance on the issues that MPAs should take into account when determining mineral and mineral related development proposals, particularly in relation to the need to ensure acceptable environmental and local amenity impacts.
- 11.202** There are recognised benefits from the location of mineral related development at mineral extraction sites. Policy DM20 supports such proposals provided they demonstrate the need for a close link between the proposed development and the mineral site. Particular consideration will be given by the MPA to ensure that impacts on the environment, local amenity and the highway network are acceptable. Where planning permission is granted for mineral related development it will be time limited to expire on the cessation of mineral extraction at the site.

- 11.203 In assessing proposals for mineral related development the MPA will also have particular regard to Policy SP2 Climate Change which requires proposals for mineral related development to demonstrate how they can contribute towards reducing greenhouse gas emissions and provide for resilience and adaptability in responding to the impacts of climate change with particular reference to energy efficient, low carbon powered and sustainably designed and constructed plant and buildings.

## MINERAL EXPLORATION

- 11.204 Exploration is essential to prove the existence and extent of mineral resources and prior to development, it is necessary to ensure that a resource is economically viable and that it can be worked. Many proposals for mineral exploration are small scale, for temporary periods and have limited impact on their surroundings. Certain types and scales of development of this nature are classed as ‘permitted development’ and as explained in this Chapter, at 11.8, do not require a formal planning application for planning permission. Larger scale proposals will normally require planning permission. Exploration for oil and gas is a special case usually involving substantial operations and deep drilling; proposals for such development will be considered against Policy SP17 the Supply of Conventional and Unconventional Oil and Gas at Chapter 8.2.
- 11.205 Seismic surveys are the most common type of geophysical survey, mainly associated with the exploration of coal, oil and gas. They provide useful information about the geology of an area and its potential to contain mineral resources rather than their existence. Most seismic surveys have little environmental impact; however, noise and vibration can raise concerns when carried out in sensitive areas and when carried out for a prolonged period. Most seismic surveys have permitted development rights but there are several exceptions relating to sensitive areas, proximity to buildings, size of the explosive charge and the duration of operations. In these cases, planning permission is required. In any event, operators are encouraged to notify local residents at an early stage, prior to surveys being carried out to allay concerns and unnecessary fears. They are also required to submit a prior notification to the MPA if the development is over a certain scale and duration.
- 11.206 Trial pits and shallow boreholes are the main methods of surface mineral exploration which obtain data on the depth, extent and quality of the mineral, the make-up of overburden and hydrological data. After the information is recorded, the pits are backfilled and reinstated. These methods of exploration are mainly permitted development; exceptions to this include operations in close proximity to buildings and operations in environmentally sensitive locations. There are also limits on the intensity of drilling, the use of explosives and the heights of rigs.

**11.207 Proposals for mineral exploration will be supported where:**

- 1) they are for a temporary period only;**
- 2) they would not have significant adverse environmental and local amenity impacts; and**
- 3) any land disturbed is satisfactorily restored at the earliest opportunity.**

### REASONED JUSTIFICATION

**11.208** The issue of mineral exploration is not addressed explicitly in the NPPF or PPG. Both, however, provide policy and guidance on the issues that MPAs should take into account when determining mineral and mineral related development proposals, particularly in relation to the need to ensure acceptable environmental and local amenity impacts.

**11.209** Mineral exploration has an important role in the identification of economically viable mineral resources. Where such development requires planning permission proposals will be supported in principal subject to particular consideration by the MPA in relation to impacts on the environment and local amenity. Where planning permission is granted, it will be for a temporary period and subject to the requirement to satisfactorily restore any land disturbed at the earliest opportunity.



WAINGROVES QUARRY

# PART FOUR

MONITORING AND IMPLEMENTATION

# CHAPTER 12: MONITORING AND IMPLEMENTATION

## INTRODUCTION AND BACKGROUND

- 12.1** The MPA is required to monitor its local plans on a regular basis to ensure that the policies are deliverable and are being implemented, in accordance with the Planning and Compulsory Purchase Act (as amended)<sup>199</sup> and Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended)<sup>200</sup>, together with the NPPF<sup>201</sup> and PPG<sup>202</sup>. Additionally, the MPA is required to assess its local plan policies at least once every five years, from the date of adoption, to determine whether they need to be reviewed, and carry out a review if necessary. In carrying out this assessment the MPA will take into account significant changes to factors that make up the evidence base or any relevant changes to national policy. The PPG sets out, however, that local plan policies do not become out of date automatically after five years.
- 12.2** PPG<sup>203</sup> requires the MPA to report annually via an Authority Monitoring Report (AMR) setting out: progress with local plan preparation in accordance with the Development Plan Scheme; activity relating to ‘duty to co-operate’, policy implementation and delivery including any information relating to indicators in the plan. It can also include developer contributions gained and used (through Section 106 planning obligations and Community Infrastructure Levy (CIL). The AMR is therefore a useful tool in informing whether there is a likely need to undertake a partial or full update of a local plan.
- 12.3** The MLP sets out the overall vision, objectives and strategic policies to address agreed priorities for the development and use of land in its area to enable the delivery of sustainable minerals development. The Vision encompasses the aspirations of people and organisations with an interest in the plan area and sets out what the area will look like at the end of the plan period in 2038, in terms of mineral development, if the objectives of the plan have been delivered successfully. The objectives set out the key goals that need to be attained to make the vision a reality whilst the policies of the plan seek to deliver those objectives. It is important therefore to monitor the effectiveness of the local plan policies in delivering the plan objectives.

200 Regulations 10A and 34

201 NPPF July 2021 Paragraphs 31-33

202 PPG Plan Making published 13 9 2018 (updated 21 7 2021) paragraph 62 Paragraph: 062 Reference ID: 61-062-20190315 Revision date: 15 03 2019

203 PPG Plan Making published 13 9 2018 (updated 21 7 2021) paragraph 73 Paragraph: 073 Reference ID: 61-073-20190315 Revision date: 15 03 2019

204 CM3/1205/156 Extension to Brassington Moor Quarry and continued extraction and processing of limestone in existing quarry and

- 12.4 The Plan will ultimately be implemented through the development management process of the MPA, via the grant or refusal of planning permission for new proposals, the monitoring of the compliance of existing minerals developments with their planning conditions and obligations and action taken on unauthorised mineral development. Planning permission will be granted where proposals are in accordance with the NPPF, the policies of the adopted Minerals Local Plan and any relevant policies in the adopted Local Plans for the area in which the proposed development is located. The Borough and District Councils will have an important role to play in safeguarding mineral resources and mineral related infrastructure from non-mineral development through the application of Mineral Consultation Areas, as will the City Council in its role as a Unitary Authority.

## MEASURES AND INDICATORS

- 12.5 In order to monitor the Plan's policies, it is important to establish appropriate measures and indicators. The effectiveness of some policies is more suitably measured through quantitative indicators e.g. landbanks of permitted reserves whilst the performance of other policies will be monitored through the grant or refusal of planning permissions. It is also important to monitor data that makes up the evidence base of the plan to ensure that it is kept up to date.
- 12.6 The Plan includes a number of objectives to enable delivery of the overall vision. Some of the objectives may be delivered by one specific policy, whilst others will be delivered by a combination of policies.
- 12.7 The Plan identifies a number of strategies for how the MPA will make provision for an adequate and steady supply of minerals over the Plan period. The strategy for most minerals takes the form of criterion-based policies, as there are no specific national or local targets to be met for their supply. For aggregate minerals, the plan is required to make provision for an agreed level of supply over the plan period and this requires more detailed monitoring, through the Local Aggregate Assessment (LAA) and the policies of the Plan.
- 12.8 An important requirement of plan preparation is the Duty to Co-operate and preparation of Statements of Common Ground which often include an agreement to monitor and share information on the supply of minerals.

## THE MONITORING FRAMEWORK

12.9 The Monitoring framework sets out the way in which the effectiveness of the Plan's policies will be measured. It includes reference to the Plan's Objectives which the policies are seeking to deliver, an indicator, method or source of monitoring, target and trigger threshold for considering action including policy/plan review.

- Objective 1 - Ensuring a Steady and Adequate Supply of Minerals
- Objective 2 - Ensuring the Prudent use of Primary Mineral and other Natural Resources
- Objective 3 - Safeguarding Mineral Resources and Mineral Related Infrastructure
- Objective 4 – Ensuring the Sustainable Transport of Minerals
- Objective 5 – Protecting Local Communities
- Objective 6 – Protecting, Conserving and Enhancing the Natural, and Built and Historic Environment
- Objective 7 – Protecting the Peak District National Park
- Objective 8 – Minimising the impacts on Climate Change and Flood Risk
- Objective 9 – Ensuring the Sustainable Restoration of Mineral Sites

## POLICY MO1: MONITORING AND IMPLEMENTATION

**12.10 The effectiveness and continued relevance of the Plan's policies will be monitored in accordance with the Monitoring Framework. Where necessary, the MPA will carry out a review/part review of the Plan.**

Policy	Objectives	Indicator Number (MO)	Indicator	Monitoring Method or Source	Target	Trigger threshold for action including consideration of Policy/Plan Review
SP1 Sustainable Minerals Development	All	1	Percentage of approved applications which are consistent with policy	Monitoring of planning application decisions	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
SP2 Climate Change	2, 4, 5, 6, 7, 8, 9	2	Percentage of approved applications which are consistent with policy	Monitoring of planning application decisions	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
SP3 Supply of Recycled and Secondary Aggregates	1, 2	3	The proportion of secondary or recycled material used as alternatives to primary aggregates stays the same or increases	Annual Monitoring survey for AWP, LAA (it is difficult to accurately monitor production)	Production of secondary and recycled aggregate stays the same or increases	The production of secondary and recycled aggregate falls over 2 consecutive years
SP4 Supply of Sand and Gravel	1	4	Total reserves to be sufficient to maintain supply for at least 7 years at all times	Annual Monitoring Survey for AWP, LAA	To maintain a landbank of at least seven years	Landbank less than 7 years for 2 consecutive years
SP4 Supply of Sand and Gravel	1	5	Annual production compared to annual provision rate in plan (the figure is not a production target but is a factor in assessing relationship between production and plan provision)	Annual Monitoring survey for AWP, LAA	Annual production to achieve annual provision rate	Annual production significantly below/ above annual provision rate for 2 consecutive years

Policy	Objectives	Indicator Number (MO)	Indicator	Monitoring Method or Source	Target	Trigger threshold for action including consideration of Policy/Plan Review
SP5 Allocation of Sites for Sand and Gravel Extraction	1	6	Allocated sites receive planning approval	Monitoring of planning application decisions	Permission granted for allocated sites	Allocated Sites not coming forward for approval or refused planning permission
SP6 Other Sites for Sand and Gravel Supply	1	7	Other sites receive planning permission	Monitoring of planning application decisions	Permission granted for other sites.	More than 1 application for other sites granted permission. (Indication of allocated sites not coming forward or level of need significantly greater than plan provision)
SP7 Supply of Aggregate Crushed Rock	1	8	Total reserves to be sufficient to maintain supply for at least 10 years at all times	Annual Monitoring Survey for AWP, LAA	To maintain a landbank of at least 10 years	Landbank less than 10 years for 2 consecutive years
SP7 Supply of Aggregate Crushed Rock	1	9	Annual production compared to annual provision rate in plan (the figure is not a production target but is a factor in assessing relationship between production and plan provision)	Annual Monitoring survey for AWP, LAA	Annual production to achieve annual provision rate	Annual production significantly below/ above annual provision rate for 2 consecutive years
SP8 Helping to Reduce Quarrying in the PDNP	1, 7	10	Continued reduction in supply of aggregates from Peak Park	Annual Monitoring Survey for AWP, LAA	To record a continued decline in aggregate output from the Peak Park	No decrease in PDNPA crushed rock aggregate landbank

Policy	Objectives	Indicator Number (MO)	Indicator	Monitoring Method or Source	Target	Trigger threshold for action including consideration of Policy/Plan Review
SP9 Supply of Building Stone	1	11	Percentage of approved applications which are consistent with policy	Monitoring of planning application decisions	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
SP10 Supply of Industrial Limestone	1	12	Percentage of approved applications which are consistent with policy	Monitoring of planning application decisions	100% approval for planning applications	More than 1 application approved/ won on appeal contrary to policy in any one year
SP11 Allocation of Site for Industrial Limestone Extraction – Aldwark South	1	13	Allocated site receives planning approval	Monitoring of planning application decisions	Permission granted for allocated site	Allocated Site not coming forward for approval or refused planning permission
SP12 Supply of Cement Making Materials	1	14	Level of supply required for each manufacturing facility	Annual Monitoring	Stock of permitted reserves at each operational site equivalent to 15 years of primary (limestone) and secondary (clay / shale) material to support maintenance and improvement and 25 years for a new kiln to be calculated when a planning application is submitted or when new capital investment is proposed. The overall amount required should be directly linked to the scale of capital investment required to construct and operate the facility.	Level of supply drops below 15 years for 2 consecutive years.
S P12 Supply of Cement Making Materials	1	15	Percentage of approved applications which are consistent with policy	Monitoring of planning application decisions	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year

Policy	Objectives	Indicator Number (MO)	Indicator	Monitoring Method or Source	Target	Trigger threshold for action including consideration of Policy/Plan Review
SP13 Supply of Brick Clay	1	16	Level of supply required at each quarry to supply clay manufacturing facility.	Annual Monitoring	Stock of reserves at each operational site equivalent to 25 years to support the manufacture of brick or clay products to support the level of actual and proposed investment required to maintain or improve an existing plant or to provide a new kiln, to be calculated when a planning application is submitted or when new capital investment is proposed. The overall amount required should be directly linked to the scale of capital investment required to construct and operate the facility.	Level of supply drops below 25 years for 2 consecutive years.
SP13 Supply of Brick Clay	1	17	Percentage of approved applications which are consistent with policy	Monitoring of planning application decisions	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
SP14 Stockpiling Brick Clay	1, 5, 6	18	Percentage of approved applications meet criteria of the policy	Monitoring of planning application decisions	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
SP15 Supply of Vein Minerals	1	19	Percentage of approved applications meet criteria of the policy	Monitoring of planning application decisions	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
SP16 Supply of Coal and Colliery Spoil Disposal	1	20	Percentage of approved applications meet criteria of the policy	Monitoring of planning application decisions	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year

Policy	Objectives	Indicator Number (MO)	Indicator	Monitoring Method or Source	Target	Trigger threshold for action including consideration of Policy/Plan Review
SP17 Supply of Hydrocarbons	1	21	Percentage of approved applications meet criteria of the policy	Monitoring of planning application decisions	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
SP18 Mineral Resources Safeguarding and Consultation Areas	3	22	Percentage of relevant approved applications that do not have an adverse effect on the identified Mineral Safeguarding Areas	Monitoring of planning applications within Mineral Consultation Areas	100% of relevant approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
SP19 Mineral Related Infrastructure Safeguarding	3	23	Percentage of relevant approved development proposals that do not have an adverse effect on the safeguarded mineral related infrastructure	Monitoring of planning applications within Mineral Consultation Areas identified for safeguarding minerals infrastructure	100% of relevant approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
SP20 Restoration of sand and gravel sites in the Trent Valley	9	24	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year

Policy	Objectives	Indicator Number (MO)	Indicator	Monitoring Method or Source	Target	Trigger threshold for action including consideration of Policy/Plan Review
DM1: Protecting Local Amenity	5, 6	25	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of approvals which may have an impact on local amenity are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
DM2: Criteria for Assessing the Benefits of Minerals Development Proposals	1, 2, 3, 6, 8	26	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
DM3: Transport of Minerals	4, 5, 8	27	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
DM4: Landscape	5, 6, 7, 8, 9	28	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
DM5: Biodiversity and geodiversity	6, 8, 9	29	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year

Policy	Objectives	Indicator Number (MO)	Indicator	Monitoring Method or Source	Target	Trigger threshold for action including consideration of Policy/Plan Review
DM5: Biodiversity and geodiversity	6, 8, 9	30	Percentage of approved proposals that provide significant biodiversity net gain and enhanced natural capital	Monitoring of planning application decisions and supporting information.	100% of approved proposals secure significant biodiversity net gain and enhancements to natural capital	More than 1 application approved/ won on appeal contrary to policy in any one year
DM6: Trees, Woodland and Hedgerows	6, 8, 9	31	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
DM6: Trees, Woodland and Hedgerows	6, 8, 9	32	Percentage of approved proposals provide significant new tree planting or compensatory planting	Monitoring of planning application decisions and supporting information.	100% of relevant approvals secure significant new tree planting or compensatory planting	More than 1 application approved/ won on appeal contrary to policy in any one year
DM7: Historic Environment	6, 7	33	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
DM8: Water Management and Flood Risk	5, 6, 8, 9	34	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year

Policy	Objectives	Indicator Number (MO)	Indicator	Monitoring Method or Source	Target	Trigger threshold for action including consideration of Policy/Plan Review
DM8: Water Management and Flood Risk	5, 6, 8, 9	35	Percentage of approved proposals that include flood risk protection and flood resilience measures.	Monitoring of planning application decisions and supporting information.	100% of relevant approvals include flood risk protection and flood alleviation measures.	More than 1 application approved/ won on appeal contrary to policy in any one year
DM8: Water Management and Flood Risk	5, 6, 8, 9	36	Percentage of approved proposals that include sustainable drainage systems.	Monitoring of planning application decisions and supporting information.	100% of relevant approvals proposals include sustainable drainage systems.	More than 1 application approved/ won on appeal contrary to policy in any one year
DM9: Soil Quality and Agricultural Land	5, 6, 8	37	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
DM10: Aviation Safety	5, 9	38	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of relevant approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
DM11: Green Belt	6	39	Percentage of approved proposals within the Green Belt meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of relevant approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year

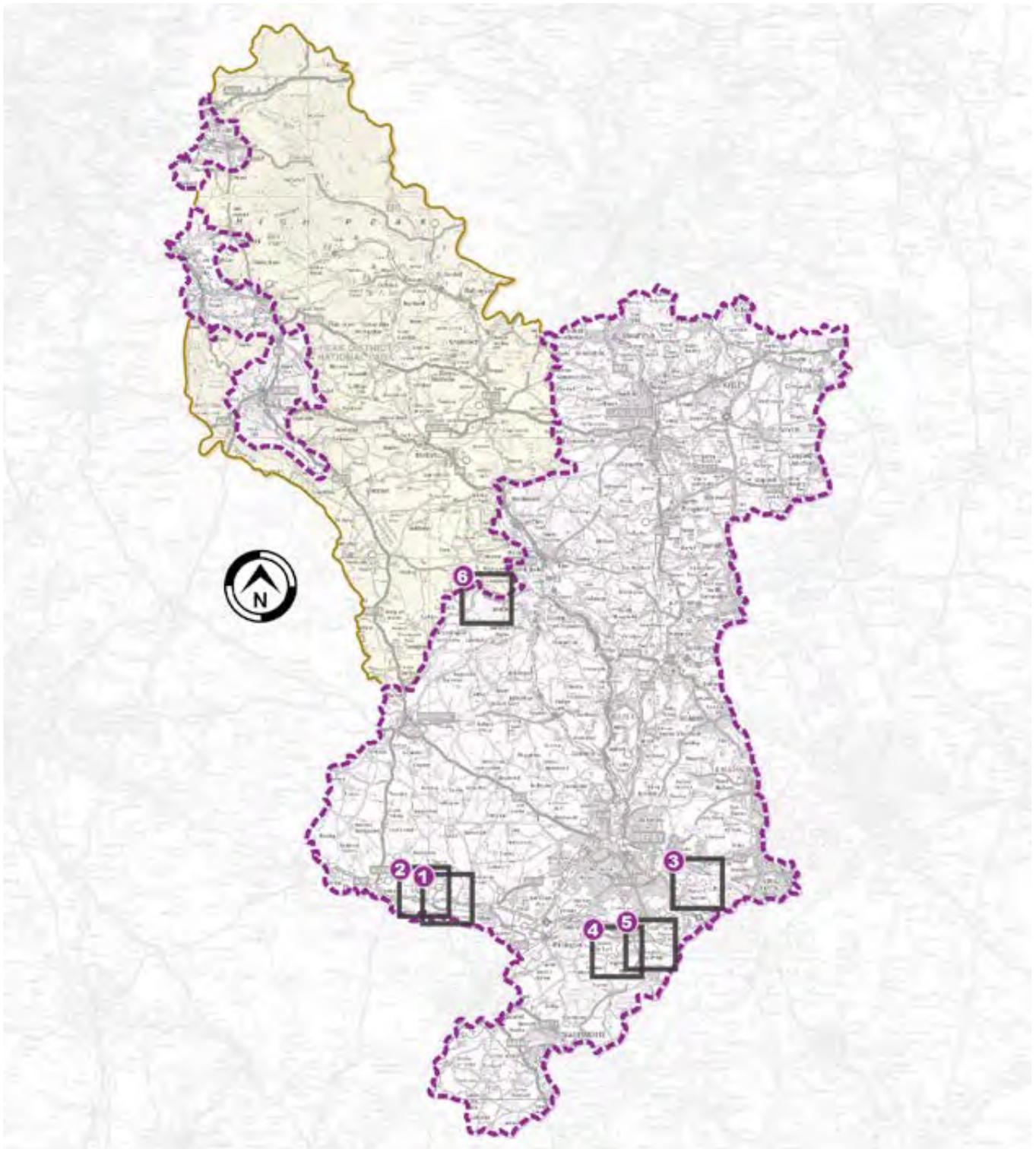
Policy	Objectives	Indicator Number (MO)	Indicator	Monitoring Method or Source	Target	Trigger threshold for action including consideration of Policy/Plan Review
DM12: Green Infrastructure	5, 6, 8, 9	40	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
DM12: Green Infrastructure	5, 6, 8, 9	41	Percentage of approved proposals that include measures to create, maintain and enhance green infrastructure	Monitoring of planning application decisions and supporting information.	100% of relevant approvals include measures to create, maintain and enhance green infrastructure.	More than 1 application approved/ won on appeal contrary to policy in any one year
DM13: Public Access	5, 8, 9	42	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
DM13: Public Access	5, 8, 9	43	Percentage of approved proposals that include improvements to the PROW network or increased public access.	Monitoring of planning application decisions and supporting information.	100% of relevant approvals include improvements to the PROW or increased public access.	More than 1 application approved/ won on appeal contrary to policy in any one year
DM14: Cumulative Impacts	5, 6, 8, 9	44	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of relevant approvals are consistent with policy	If more than 1 proposal approved in any one year goes against this policy

Policy	Objectives	Indicator Number (MO)	Indicator	Monitoring Method or Source	Target	Trigger threshold for action including consideration of Policy/Plan Review
DM15: Restoration, Aftercare and After-Use of Mineral Sites	5, 6, 7, 8, 9	45	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of approvals are consistent with policy	If more than 1 proposal approved in any one year goes against this policy
DM16: Planning Obligations	5, 6, 7, 8, 9	46	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of approvals consistent with policy and granted subject to S106 where needed	If more than 1 proposal approved in any one year goes against this policy
DM17: Borrow Pits	1	47	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of relevant approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
DM18: Re-Working of Spoil Tips	1	48	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of relevant approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
DM19: Incidental and Prior extraction of Clay	1	49	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of relevant approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year

Policy	Objectives	Indicator Number (MO)	Indicator	Monitoring Method or Source	Target	Trigger threshold for action including consideration of Policy/Plan Review
DM20: Mineral Related Development	1, 5, 6	50	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of relevant approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year
DM21 Mineral Exploration	1	51	Percentage of approved proposals meet criteria of the policy	Monitoring of planning application decisions and supporting information.	100% of relevant approvals are consistent with policy	More than 1 application approved/ won on appeal contrary to policy in any one year

# DERBYSHIRE AND DERBY MINERALS LOCAL PLAN POLICIES MAP

The Local Plan area is the administrative area of Derby City Council and Derbyshire County Council (excluding the Peak District National Park).



Policies contained in the Plan apply to the whole of the Plan area except for Policy SP5 (Insets 1-5), Policy SP11 (Inset 6) and Policy SP18 (see Insets 7-11).

-  Inset to Policies Map
-  Part of Derbyshire outside the plan area
-  Minerals Local Plan Area

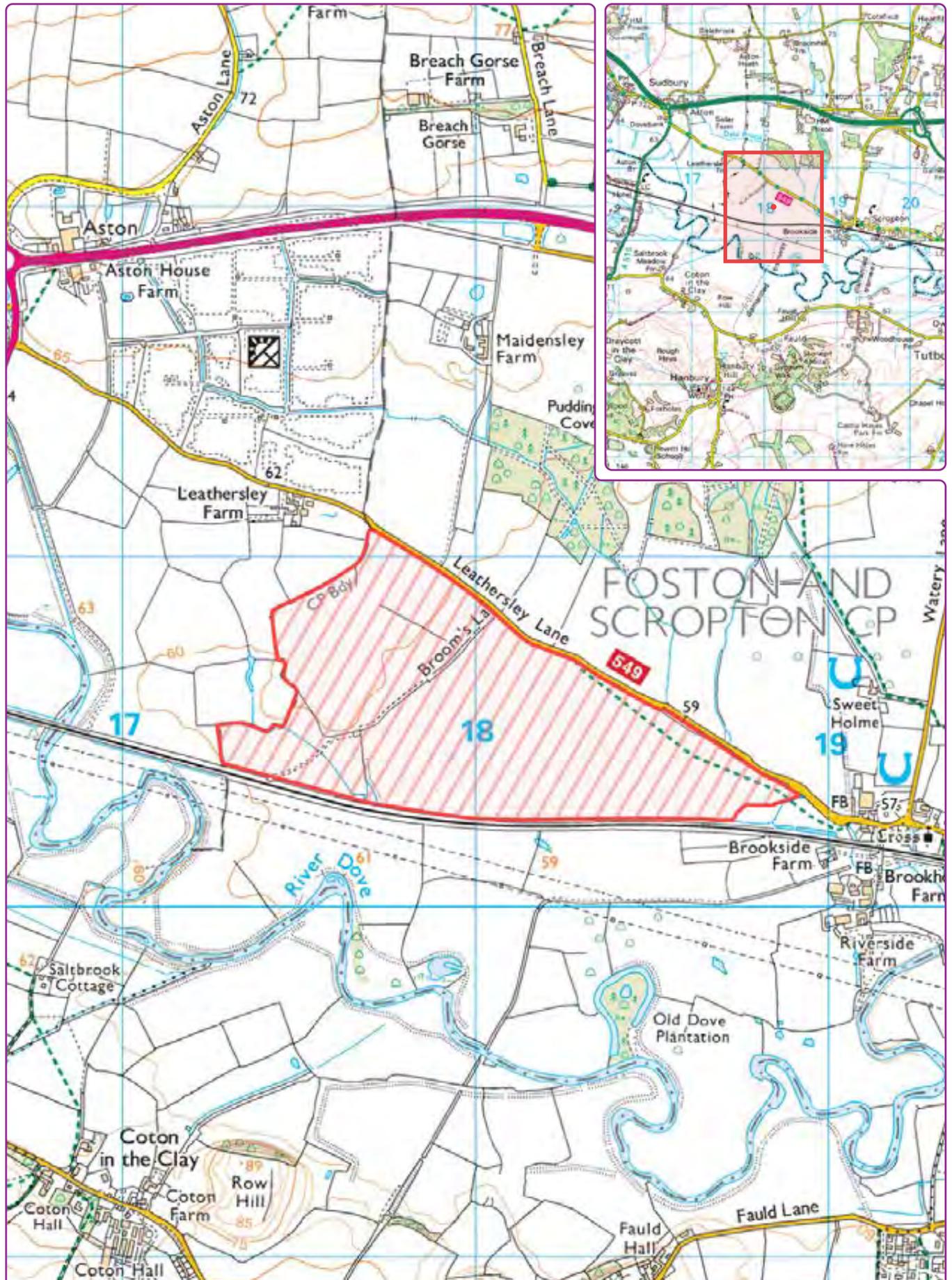
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# INSET 1 FOSTON

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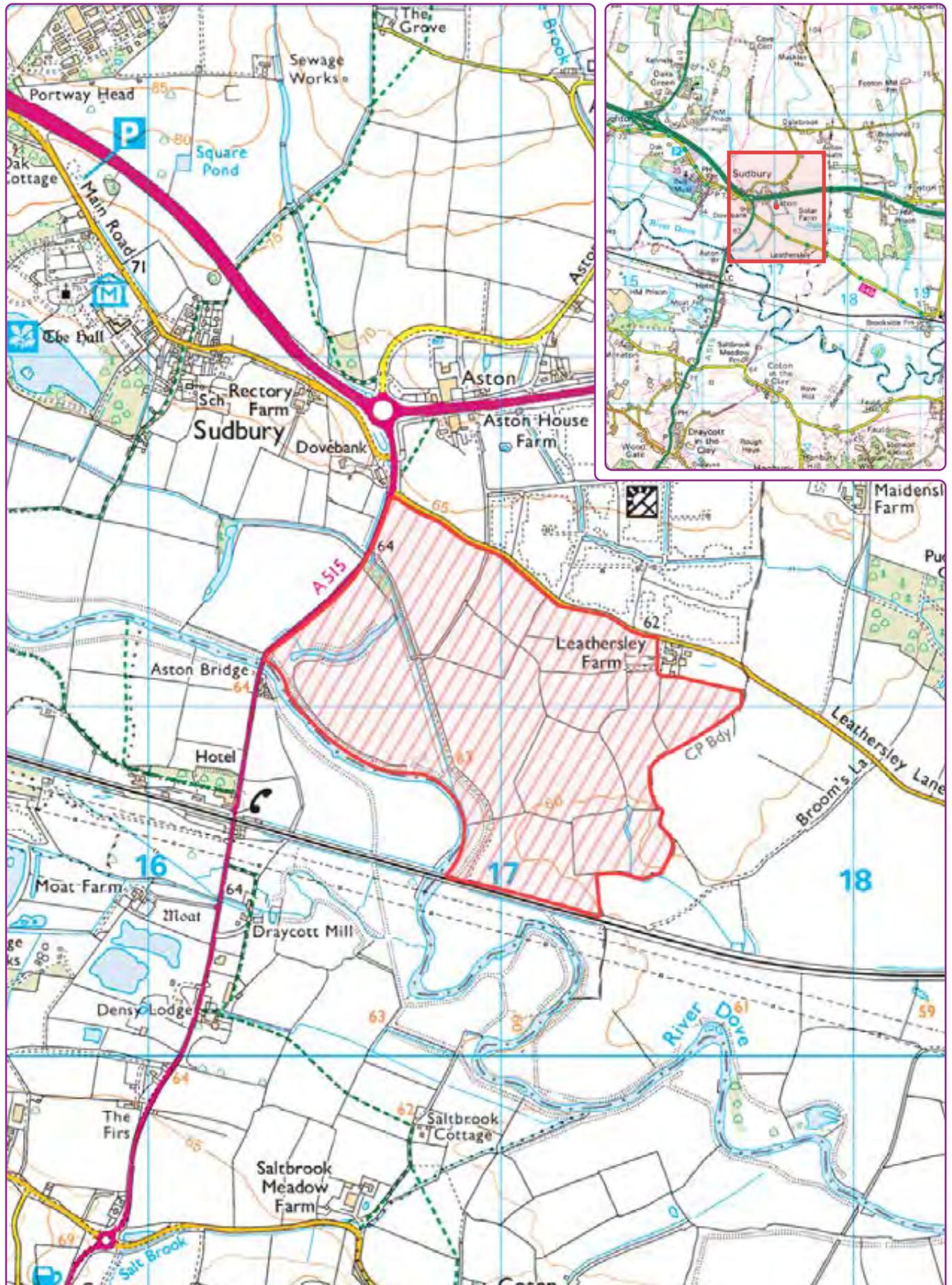


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# INSET 2 SUDBURY

Scale 1:15000

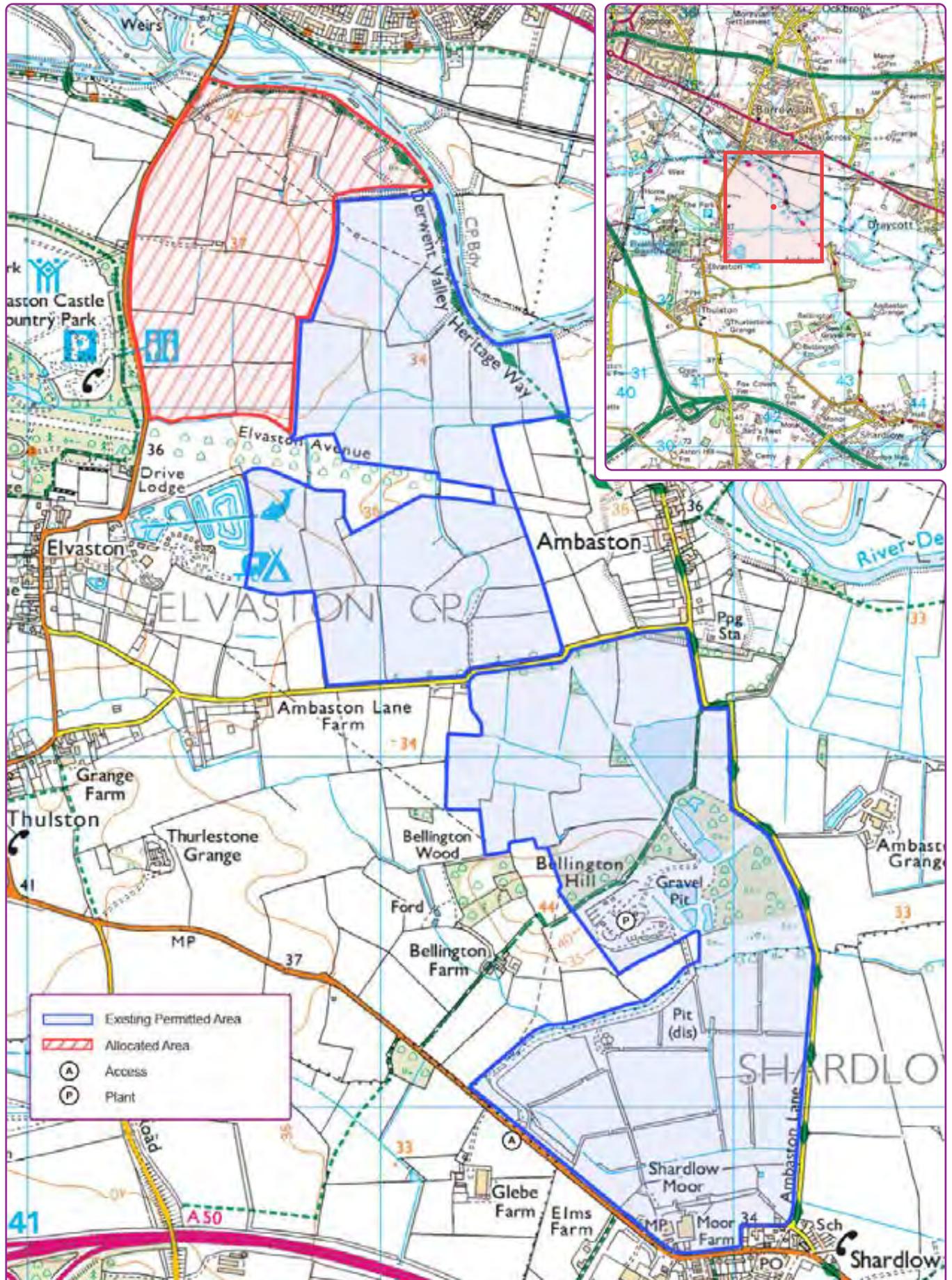


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# INSET 3 ELVASTON

Scale 1:15000

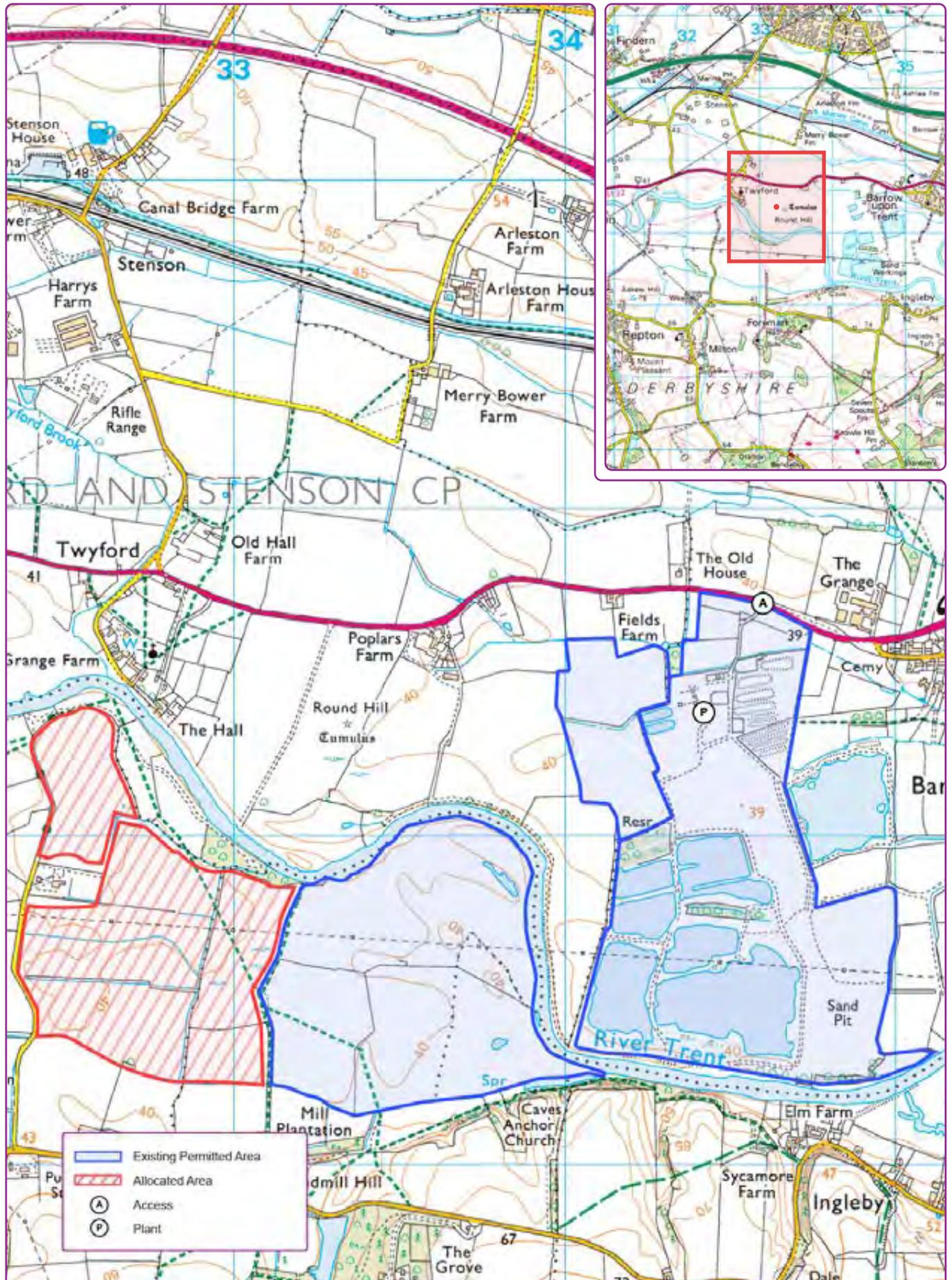


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# INSET 4 SWARKESTONE SOUTH

Scale 1:15000

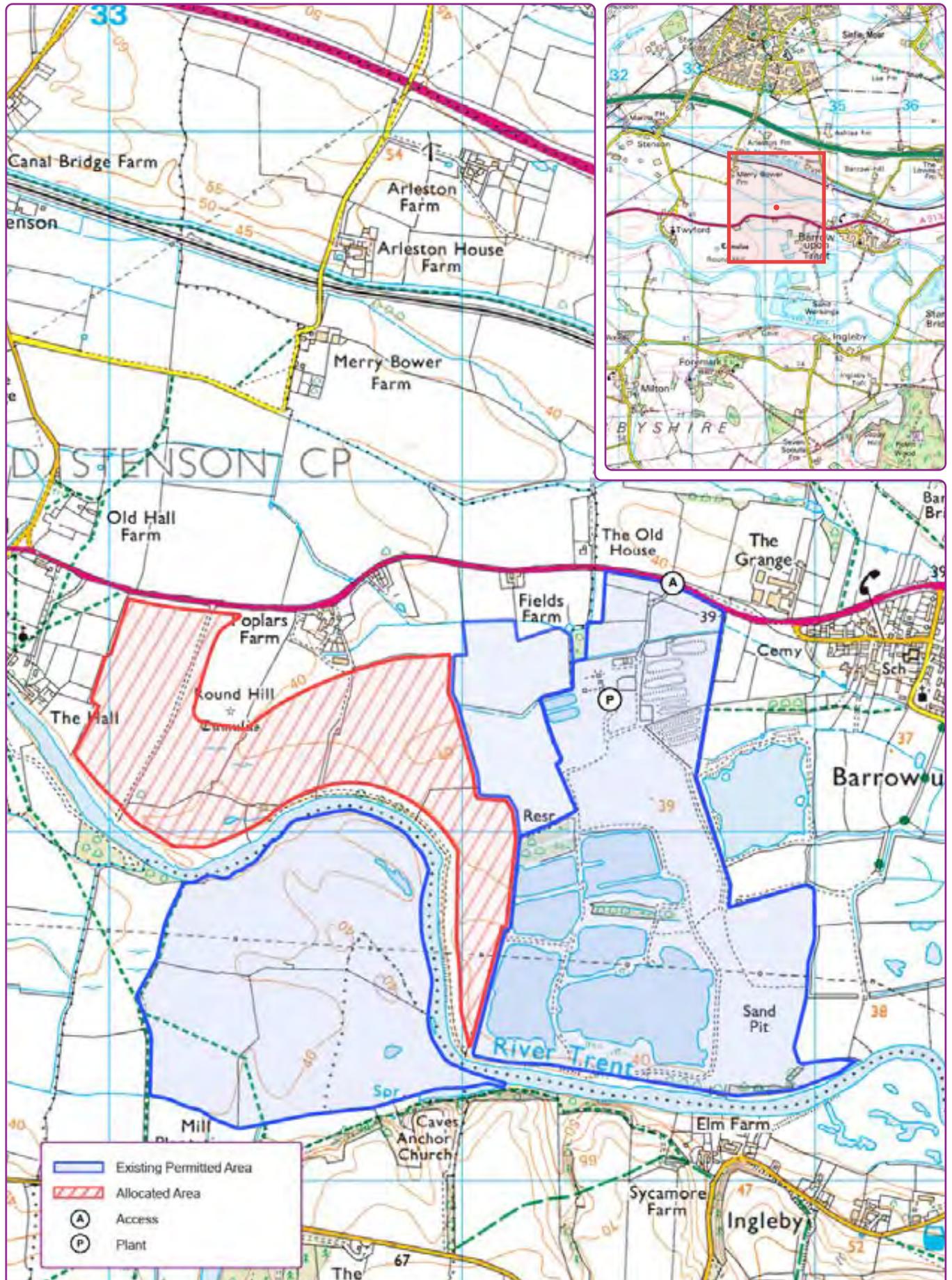


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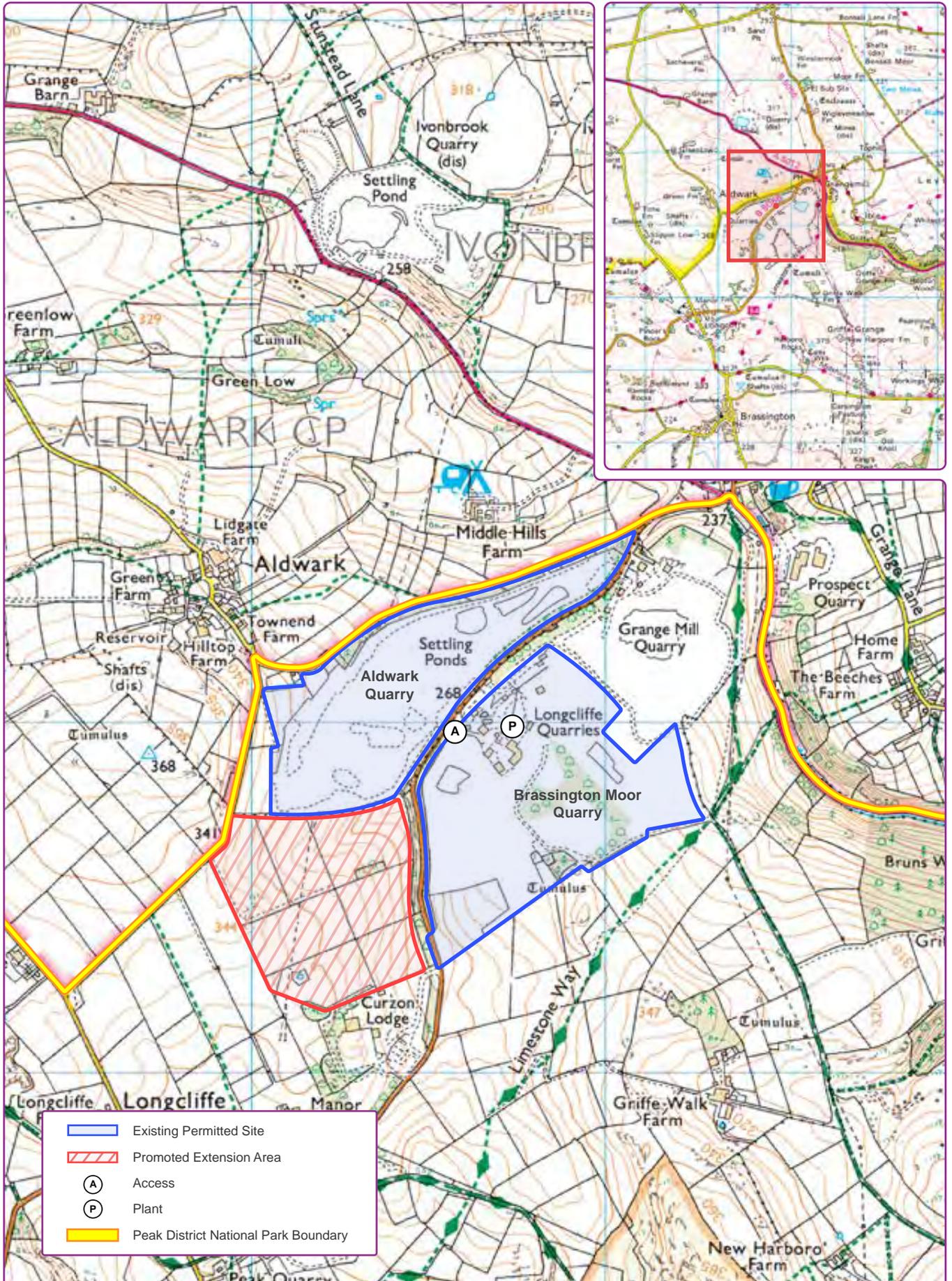


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# INSET 6 ALDWARK SOUTH

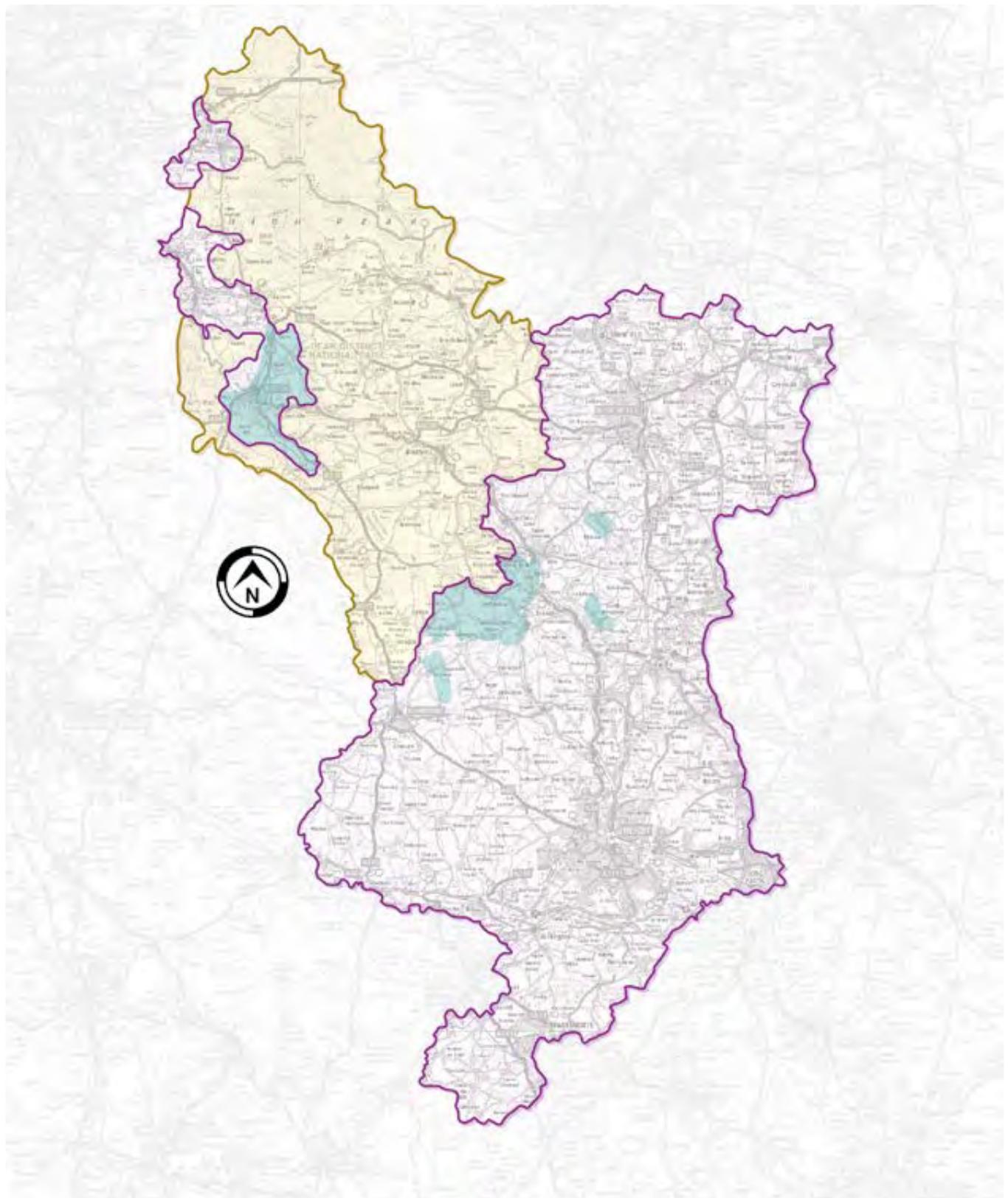
Scale 1:15000



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# INSET 7 CARBONIFEROUS LIMESTONE SAFEGUARDING AREA



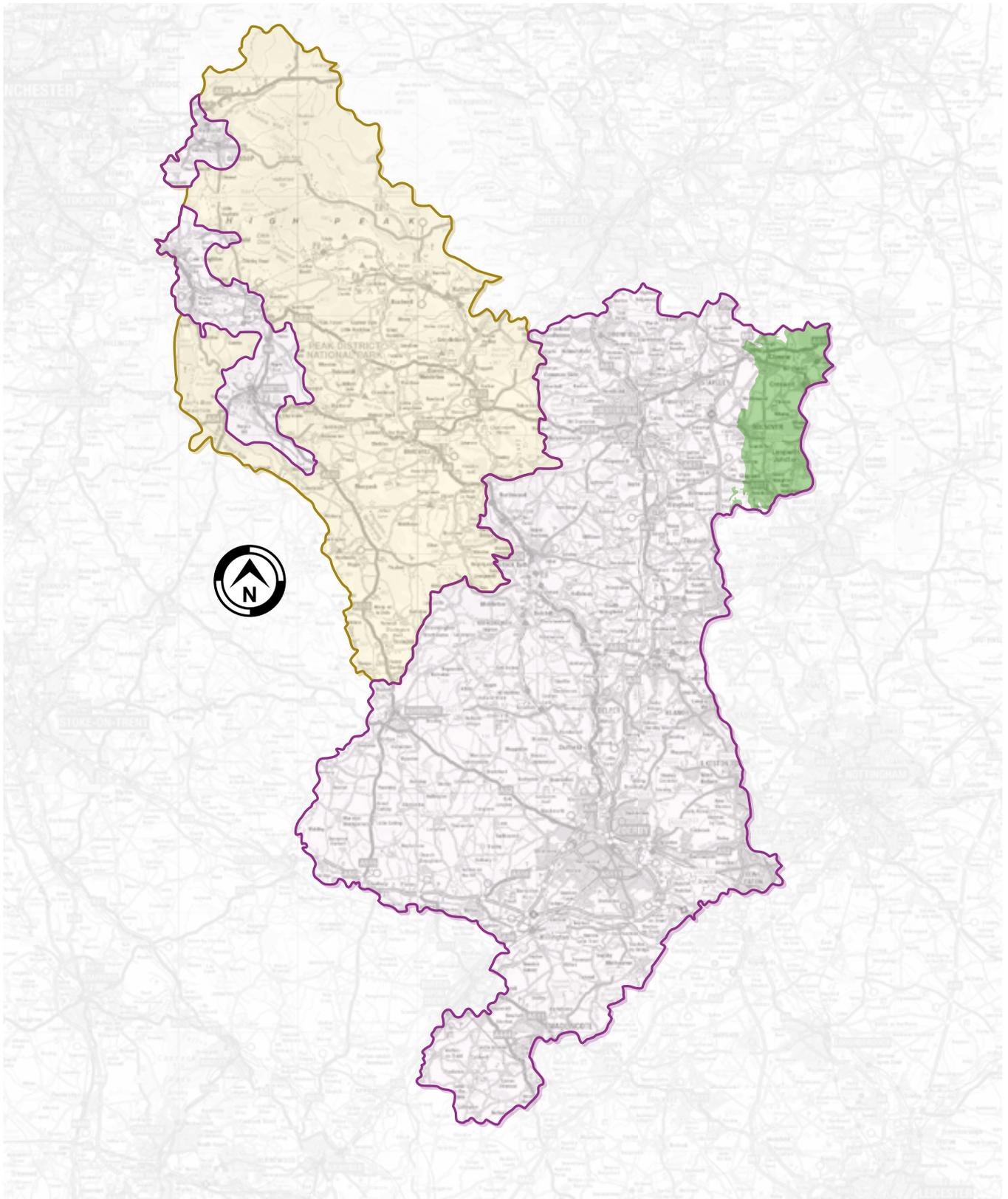
-  Plan Area
-  Peak District National Park Area
-  Carboniferous Limestone Safeguarding Area

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# INSET 8 PERMIAN LIMESTONE SAFEGUARDING AREA



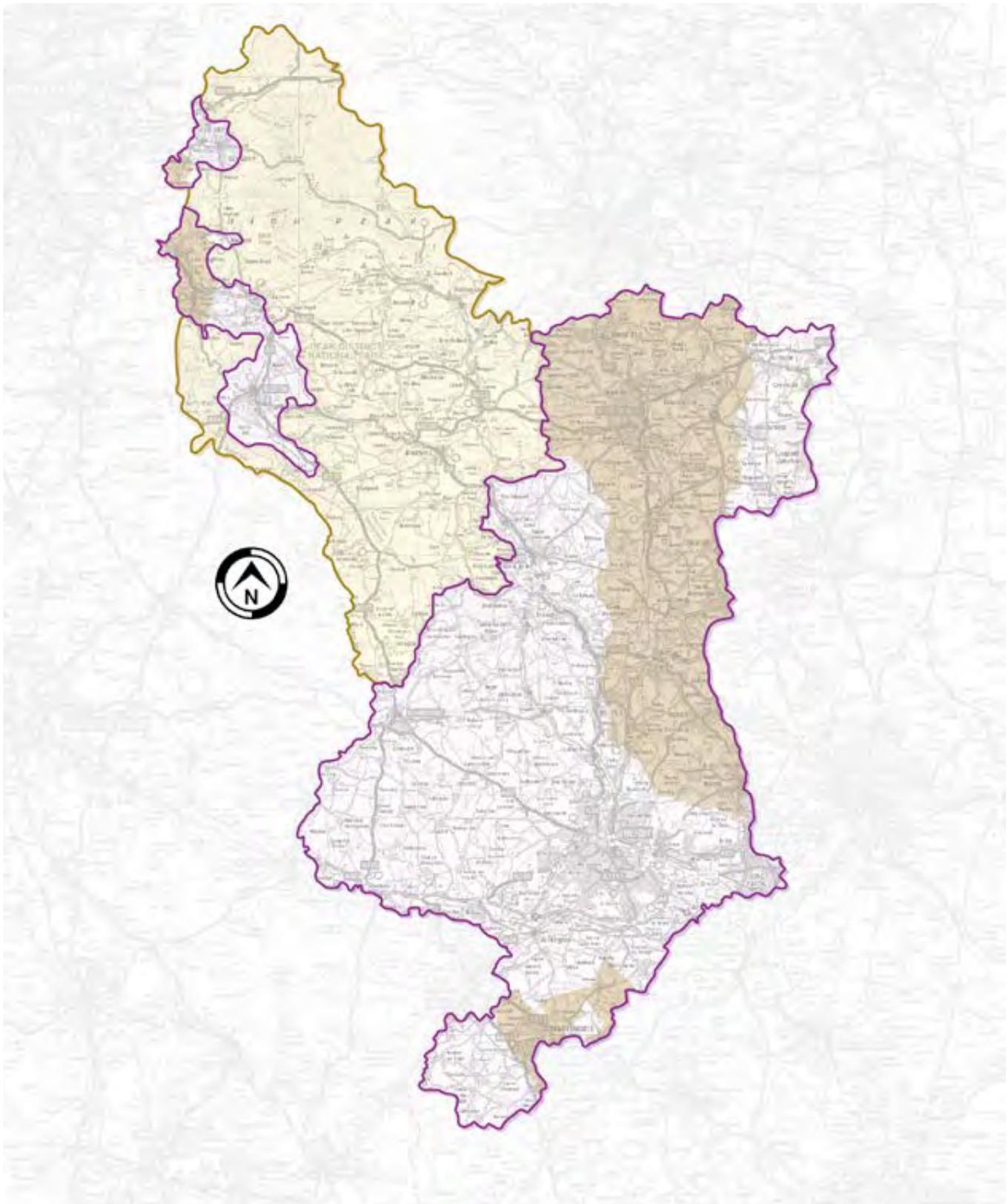
-  Plan Area
-  Peak District National Park Area
-  Permian Limestone Safeguarding Area

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# INSET 9 SURFACE COAL SAFEGUARDING AREA



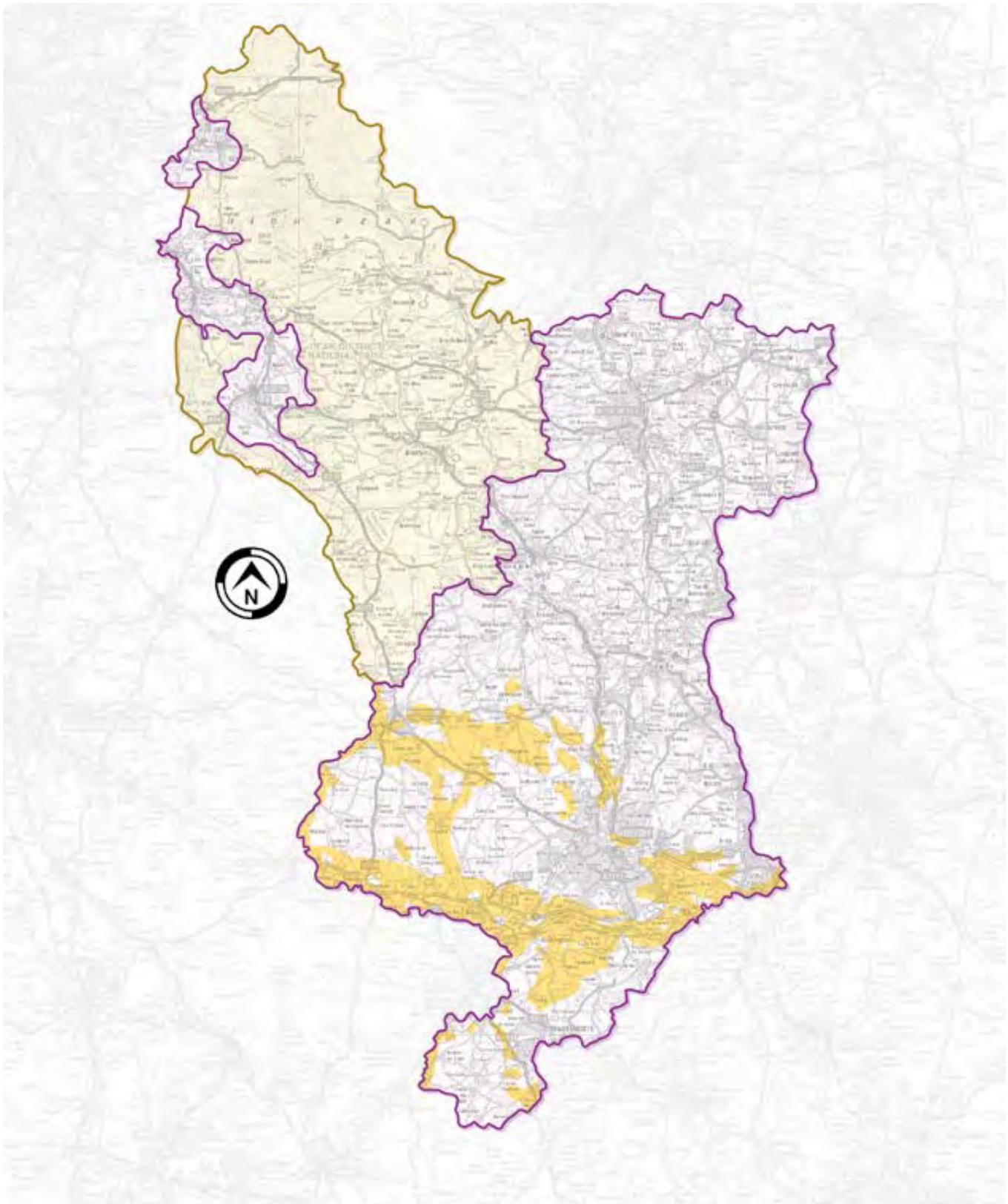
-  Plan Area
-  Peak District National Park Area
-  Surface Coal Safeguarding Area

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# INSET 10 SAND AND GRAVEL SAFEGUARDING AREA



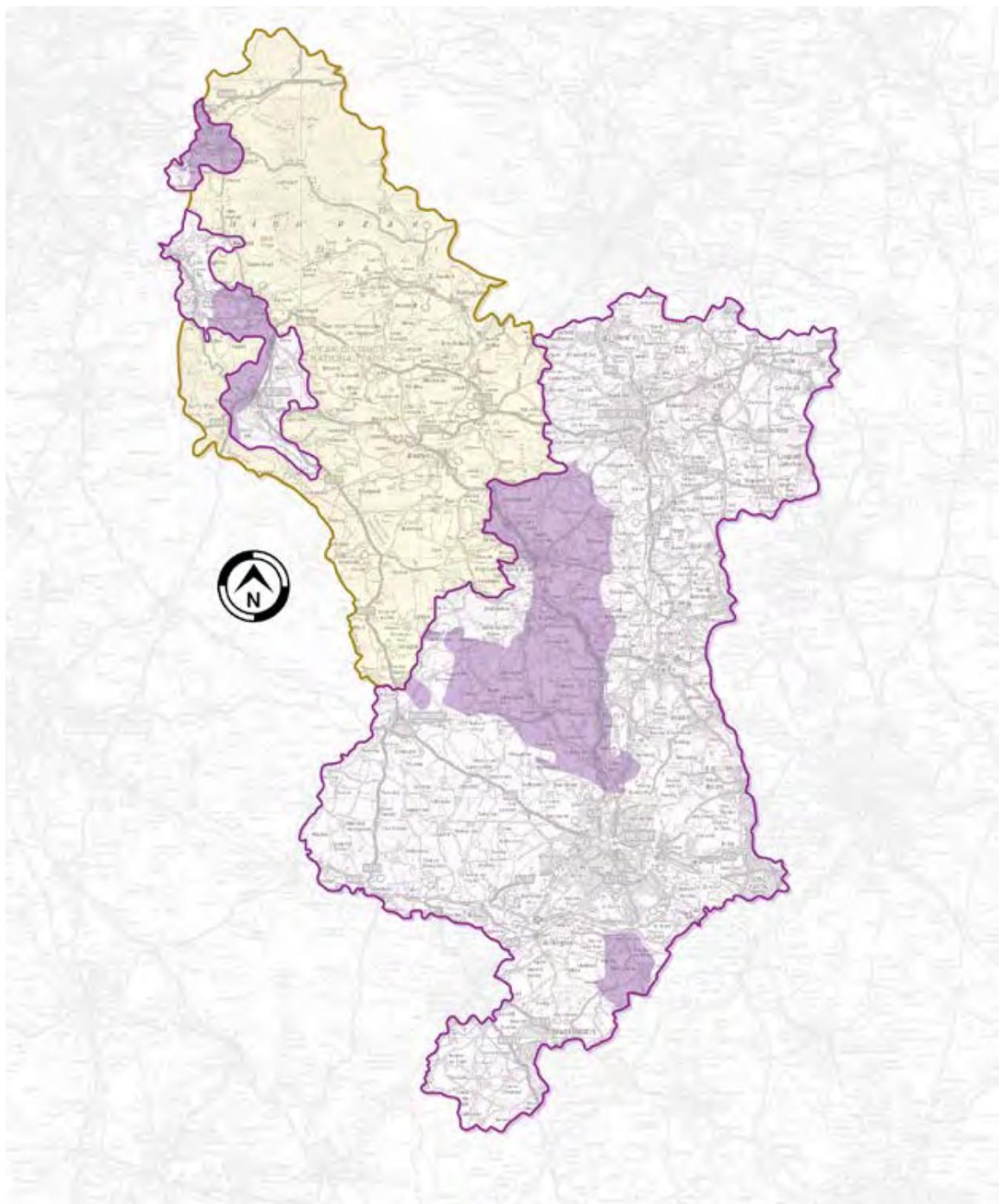
- Plan Area
- Peak District National Park Area
- Sand and Gravel Safeguarding Area

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# INSET 11 EXTENT OF SANDSTONE / GRITSTONE RESOURCE



-  Plan Area
-  Peak District National Park Area
-  Sandstone/Gritstone Safeguarding Area

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# APPENDIX A: SITE ALLOCATION PRINCIPAL PLANNING REQUIREMENTS

A1 This Appendix applies to the sites proposed for allocation under the following policies of the local plan:

- Policy SP5 Allocation of Sites for Sand and Gravel Extraction – Foston, Sudbury, Elvaston, Swarkestone South and Swarkestone North.
- Policy SP11 Allocation of Site for Industrial Limestone Extraction - Aldwark South.

A2 It sets out the principal site-specific requirements that will need to be addressed as part of any planning application to work the allocated site. The requirements are not necessarily a comprehensive set of all the matters which will need to be addressed. Planning proposals will need to provide sufficient evidence to satisfy all policies of the development plan, where relevant.

## FOSTON

### Background

A3 This is a greenfield site, representing a new operation for the extraction of sand & gravel. This generally level site is situated to the south of the A50, just to the west of Scropton village and to the south of Foston. Leathersley Lane forms its northern boundary and the railway line forms its southern boundary. It is about 71 hectares in size and is currently in agricultural use, predominantly as arable land. There are boundary hedgerows with mature, mainly, oak trees. A public footpath runs parallel to Leathersley Lane through part of the site.

A4 It has estimated sand and gravel reserves of around 3.1 million tonnes. It would be worked at around 400,000-500,000 tonnes per annum over a six-year period from around 2030. The operator has indicated that the plant site and access may be located towards the western part of the site, however, the precise location will be subject to more detailed consideration by the operator involving discussions with the Highways Service, but it has confirmed that all HGV traffic would be routed to the west to join the A50 at the Sudbury roundabout.

A5 A wetland/water-based biodiversity restoration scheme is proposed with an element of improved public access. The Environment Agency had objected to this proposal at the previous consultation stage regarding the impact of working this site on the flood alleviation scheme. A revised boundary has since been proposed by the mineral operator, which will ensure the protection of the flood defence barrier and a potential flood storage scheme has been proposed to help reduce the impact of flooding on the local area. The revised scheme has been discussed with the Environment Agency which has withdrawn its objection as a result subject to the submission of an appropriate assessment at the planning application stage (which has been reviewed by a Reservoir panel engineer) which considers both the impact on the operation of the reservoir, and separately on fluvial flood risk, resulting from any proposed extraction area.

## PRINCIPAL PLANNING REQUIREMENTS

A6 The MPAs have carried out an assessment of the promoted site as part of the preparation of the local plan and consider that mineral extraction from the proposed site is likely to be acceptable in planning terms subject to the following issues having been addressed satisfactorily, which include:

- 1) An assessment of how the site would be developed and operated in such a way that the local community and environment are protected from significant adverse impacts – The nearest communities are the villages of Scropton and Foston, which lie approximately 200 metres away to the east and 1km north of the site respectively. Leathersley Farm is located approximately 185m to the north west of the site.
- 2) An ecological assessment of the designated sites, habitats, fauna and flora present on or adjacent to the site and/or potentially impacted by the site's development, and an evaluation of the impact of development upon species and habitats present on or adjacent to the site, and on the wider ecological network. The site is dominated by arable farming, and historic mapping would suggest that agricultural intensification has resulted in the removal of many internal hedges previously present on site. The remnant hedgerows on site do contain some hedgerow trees which may be of some interest, although the hedgerows otherwise appear to be intensively managed. Small areas of semi-natural habitat may persist at the southern end of the site, although there are no notable habitats or designated sites recorded within or immediately adjacent to the site. Protected and notable species records are very limited within and around the site, with only one old record for water vole seemingly relevant.

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- 3) An assessment of the effects on the historic environment including designated sites and settings and archaeological remains. There are two records for cropmarks within the site, suggestive of Iron Age/Romano-British field systems and enclosures. A number of palaeo-channels are also mapped. Two records of ridge and furrow appear to be ploughed out. The Dove Valley is associated with deep alluvial deposits which can blanket archaeological and palaeo-environmental remains, so the surface-visible resource may underestimate the true extent and complexity of buried remains. In terms of historical sites and settings, Leathersley Farmhouse (Grade II Listed) is 210m from the western end of the site. Tutbury Castle draws upon long views across the Dove floodplain, and the site may well be visible from here. Sudbury Hall and Estate are about 1km from the western boundary of the site and although are generally screened from the site, the sensitivity of this historic area means the potential impact should be considered.
- 4) An assessment of the effects of the development on the water environment. The site lies in flood zone 3 which has the highest possibility of flooding but in accordance with PPG sand and gravel working is classed as water compatible development which is appropriate development in zone 3. A geotechnical assessment of the potential impact of the development on the flood defences will be undertaken. This includes the Reservoir Flood Defence Embankment adjacent to the eastern boundary of the site and the part of the site which is included within the Lower Dove Flood Storage Scheme. Appropriate stand-offs will be proposed as a result to ensure the protection of the flood defences. of internal hedgerows.

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- 5) An assessment of the landscape and visual impact of the site, including the provision of suitable landscaping measures. The proposed allocation is located within the Riverside Meadows LCT; a landscape typically farmed as permanent pasture. Evidence suggests that there has been significant boundary loss as a result of agricultural intensification and today this site is comprised of a small number of very large arable fields. Hedgerows are well managed but lack hedgerow trees. In terms of visual impact, although Leathersley Farm is located approximately 185m to the NW and Scropton is approx. 190m to the east, the site is generally well contained by existing vegetation and would not be visible from these areas to any significant extent. Two residential properties on the western edge of Scropton lie about 200m from the eastern edge of the site and are the only properties that may have direct views onto a proportion of the site (the eastern third of the site). Views of the site are predominantly from Leathersley Lane and Brooms Lane and the railway, which runs along the southern boundary of the site. A public footpath also runs parallel to Leathersley Lane through part of the site from where views of the site would be evident. Views from Foston and the A50 to the north are obscured by dense woodland. Tutbury Castle and grounds, which is a scheduled monument and lies on higher ground to the south, could, potentially, have distant views of the site. Overall, there are some/few visual receptors and potentially large parts of the site would be visible given the lack of internal hedgerows.
- 6) A Transport Assessment would need to accompany any application to assess the impact of traffic generated by the site on the surrounding highway network, particularly A515/A50 junction and include details of proposed measures to ensure that HGV traffic generated by the development did not turn right out of the site. Leathersley Lane is within an area wide Weight Restriction and forming an access within the limit will give any HGV the legitimate right to 'access' the site via any of the routes throughout the restricted area. The means of access would therefore need to be located outside of the restriction, to direct HGVs via the suitable routes of A50 and A515. With the restriction starting immediately on entering Leathersley Lane, this is likely to require a modification to the existing order, which would be subject to public consultation.

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- 7) An account of the mitigation and compensation measures required to address environmental impacts, and of the biodiversity enhancement opportunities arising from the development, including its restoration and aftercare.
- 8) The restoration of the site should take into account the Restoration Strategy for the Trent Valley, as set out in Policy SP25 to ensure that the wider context of the valley is taken into account in developing a coordinated and strategic approach to the restoration of the site.

## SUDBURY

### Background

- A7** This 79.3 hectare site is situated between Leathersley Lane, which forms the northern boundary of the site, and the River Dove to the south. The railway forms the far southern boundary of the site with the River Dove just beyond. The A515 forms the western boundary, beyond which lies Sudbury village, including Sudbury Hall Park and Garden. It is relatively flat and open in character, being within the floodplain of the River Dove, and is in agricultural use, being divided into 12 small fields, with the majority of fields being for arable production and others used for livestock grazing. Many of the field boundaries are of hedgerows and standard trees. There are lines of willow trees and a wildlife site in the south western part of the site, close to the River Dove.
- A8** The yield of the site would be around 2 million tonnes of sand & gravel, extracted over a period of 7-8 years from an extraction area of around 60 hectares. This equates to an annual output of between 250,000 and 300,000 tonnes.
- A9** The access is likely to be close to the junction of Leathersley Lane with the A515 in the north west corner of the site. The processing plant is also likely to be in the north west part of the site to minimise product haulage distance and flood risk.
- A10** Restoration is likely to be mainly to water-based uses with a high nature conservation/ biodiversity component.

## PRINCIPAL PLANNING REQUIREMENTS

**A11** The MPAs have carried out an assessment of the promoted site as part of the preparation of the local plan and consider that mineral extraction from the proposed site is likely to be acceptable in planning terms subject to the following issues having been addressed satisfactorily, which include:

- 1) An assessment of how the site would be developed and operated in such a way that the local community and environment are protected from significant adverse impacts – The nearest community is the village of Sudbury 300m to the north west of the site. Leathersley Farm is located adjacent to the north east boundary of the site. Given the flat topography, large tracts of the site would be visible from these and other individual properties in the surrounding area, although visibility would be less from receptors to the west as a result of the lines of willow trees in the south west section of the site. There could also be higher level views from Tutbury Castle, which is a scheduled monument. No public rights of way cross the site.
- 2) An ecological assessment of any designated sites, habitats, fauna and flora present on or adjacent to the site and/or potentially impacted by the site's development, and an evaluation of the impact of development upon species and habitats present on or adjacent to the site, and on the wider ecological network. The site assessment showed that the site has limited priority ecological value with the exception of the Wildlife Site (a feature which could be enhanced). There are some established hedgerows, though not generally species rich and some mature oak and ash – possible veterans.
- 3) An assessment of the effects on the historic environment including designated sites and settings and archaeological remains. Leathersley Farmhouse (Grade II Listed) immediately adjacent. Sudbury Hall (Grade I Listed) is within 1km, with its Grade II Registered Park at around 740m. The proposal could have an impact on Sudbury conservation area and the setting of the Grade I Sudbury Hall and its Grade II Registered Historic Park and Garden. In terms of archaeology, there are HER records for earthwork ridge and furrow within the site although there is evidence this appears to have been ploughed out. The Dove is a very active floodplain with substantial alluviation, and there is consequently potential for geo-archaeology (palaeochannels etc) with well-preserved remains and early archaeology beneath the alluvium.

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- 4) An assessment of the effects of the development on the water environment. The site lies in flood zone 3 which has the highest possibility of flooding but in accordance with PPG sand and gravel working is classed as water compatible development which is considered to be appropriate development in flood zone 3. The site straddles a flood defence embankment which controls flows into a flood storage area, constructed by the Environment Agency as part of the Lower Dove Flood Risk Management scheme in 2012/13. This scheme defends Scropton, Hatton and other villages downstream from flooding. A detailed assessment of the potential impact of the development on these flood defences will have to be undertaken as part of any submission for the development of this site.
- 5) An assessment of the landscape and visual impact of the site, including the provision of suitable landscaping measures. The site is dominated by small scale arable fields enclosed by hedgerows with scattered hedgerow trees. The site retains a strong landscape character with an intact network of small fields, albeit land use has changed from meadow to arable with the loss of associated ridge and furrow. In terms of visual impact, given the flat topography, large tracts of the site would be visible from the properties and roads close to the site, although visibility would be less from receptors to the west as a result of the lines of willow trees in the south west section of the site. There could also be higher level views from Tutbury Castle, which is a scheduled monument.
- 6) A Transport Assessment would need to accompany any application to assess the impact of traffic generated by the site on the surrounding highway network, particularly the A515/A50 junction and include details of proposed access measures to ensure that HGV traffic generated by the development did not turn right out of the site along Leathersley Lane towards Scropton. Leathersley Lane is within an area wide Weight Restriction and forming an access within the limit will give any HGV the legitimate right to 'access' the site via any of the routes throughout the restricted area. The means of access would therefore need to be located outside of the restriction, to direct HGVs via the suitable routes of A50 and A515. With the restriction starting immediately on entering Leathersley Lane, this is likely to require a modification to the existing order, which would be subject to public consultation. Leathersley Lane also carries the route of the National Cycle Network and therefore use of the road by HGVs should be minimised.

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- 7) An account of the mitigation and compensation measures required to address environmental impacts, and of the biodiversity enhancement opportunities arising from the development, including its restoration and aftercare.
- 8) The restoration of the site should take into account the Restoration Strategy for the Trent Valley, as set out in Policy SP25 to ensure that the wider context of the valley is taken into account in developing a coordinated and strategic approach to the restoration of the site.

## SWARKESTONE NORTH

### Background

- A12** This is a proposed extension to the operational Swarkestone Quarry. The site is 100 hectares in size and is situated between the existing quarry to the east and Twyford village to the west. The River Trent forms the southern boundary of the site and the A5132 the northern boundary. It is generally level, open terrain, being within the floodplain of the River Trent. It is currently in agricultural use with a mix of arable and grazing uses.
- A13** It is estimated that this site would yield 4.5 million tonnes of sand and gravel from deposits with an average depth of 4 metres. Deposits have been classified as being of medium to high quality. The operator estimates that the annual output would be 300,000 tonnes, and the material would be extracted over a 15-year period.
- A14** It is proposed to continue to use the existing processing plant and access road. The excavated material would be transported to the plant by truck or conveyor. The access joins the A5132 and lorries would generally then travel east onto the A514 before joining the A50.
- A15** The site would be restored to mainly water-based end uses, with a focus on nature conservation and wildlife biodiversity.

## PRINCIPAL PLANNING REQUIREMENTS

**A16** The MPAs have carried out an assessment of the promoted site as part of the preparation of the local plan and consider that mineral extraction from the proposed site is likely to be acceptable in planning terms subject to the following issues having been addressed satisfactorily, which include:

- 1) An assessment of how the site would be developed and operated in such a way that the local community and environment are protected from significant adverse impacts. There are several properties which have the potential to be affected by the working of this site. There are properties in Twyford to the north-west and several individual residential properties to the north of the site, including a number of dwellings at the converted Poplars Farm and Fields Farm, which stand close to the northern site boundary of the site. Part of the site is also visible from properties in Ingleby to the south.
- 2) An ecological assessment of any designated sites, habitats, fauna and flora present on or adjacent to the site and/or potentially impacted by the site's development, and an evaluation of the impact of development upon species and habitats present on or adjacent to the site, and on the wider ecological network. The majority of site is arable land with localised improved pasture adjacent to Twyford and possibly semi-improved in field by the river with palaeochannels. There are limited mature/veteran trees in centre of the site. There are no records for priority habitats on this site.
- 3) An assessment of the effects on the historic environment, including designated sites and settings and archaeological remains. In terms of designations, an upstanding Round Barrow, designated as a Scheduled Monument is located in the northern part of the site. Consideration will need to be given to the setting of this monument. In terms of archaeology, Cropmarks are recorded north and south of the scheduled monument. Localised palaeochannels are present and evident along the southern fringe of the site, visible as an existing stream line.
- 4) An assessment of the effects of the development on the water environment. The site lies in flood zone 3 which has the highest possibility of flooding but in accordance with PPG sand and gravel working is classed as water compatible development which is appropriate development in flood zone 3.

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- 5) An assessment of the landscape and visual impact of the site, including the provision of suitable landscaping measures. In terms of the landscape, the site crosses two Landscape Character Types but is poorly representative of each. The majority of the land is usually down to arable with some localised pasture associated with smaller fields adjacent to Twyford and immediately adjacent to the River Trent. Hedgerows are generally poor, in some places missing and generally species poor. There is a general lack of tree cover associated with field boundaries and the river. Trees are mostly associated with the semi-improved areas near the river. The overall condition of the site is considered to be average to poor. There is an isolated burial mound and some localised ridge and furrow (poor condition) within the site. In terms of visual impact, there are several properties from which the site is visible. There are properties in Twyford to the north-west and several individual residential properties to the north of the site, including properties at Poplars Farm and Fields farm on Twyford Road, close to the northern site boundary of the site. Part of the site is also visible from properties in Ingleby to the south.
- 6) Transport Assessment would need to accompany any application to assess the access to this site and the impact of traffic generated by the site on the surrounding highway network. It is expected that this site would be worked through the existing plant and access arrangements so the impact on the surrounding area in this respect is likely to be unchanged.
- 7) An account of the mitigation and compensation measures required to address environmental impacts, and of the biodiversity enhancement opportunities arising from the development, including its restoration and aftercare.
- 8) The restoration of the site should take into account the Restoration Strategy for the Trent Valley, as set out in Policy SP25 to ensure that the wider context of the valley is taken into account in developing a coordinated and strategic approach to the restoration of the site.

## SWARKESTONE SOUTH

### Background

- A17** This is an extension to the existing active Swarkestone Quarry. The 79 hectare site is situated to the west of the current operational Swarkestone Quarry, to the south of the River Trent. The western boundary is formed by a private access road and the southern boundary by a brook. Repton village is situated to the south-west and Ingleby and Foremark villages to the south- east. Being within the floodplain of the River Trent, the terrain is generally flat and open. It is in agricultural use, predominantly as pasture land, with a number of hedgerows and mature/ semi-mature hedgerow trees.
- A18** Taking account of proposed stand offs, the proposed extraction area would be around 70 hectares. It has been estimated that the site would yield saleable reserves of over 2.5 million tonnes of sand and gravel from deposits that average 3.5 metres in depth.
- A19** Annual output is estimated at 300,000 tonnes. The lifespan of the site is estimated as being around 8-9 years.
- A20** The company proposes that the existing processing plant would be used and that the existing access road onto the A5132 would also be used. The mineral would be transported across the River Trent using the temporary bridge. It is estimated that there would be about 110 lorry movements per day from/to the site.
- A21** The site would be restored to mainly water-based end uses, with a focus on nature conservation and wildlife biodiversity.

## PRINCIPAL PLANNING REQUIREMENTS

**A22** The MPAs have carried out an assessment of the promoted site as part of the preparation of the local plan and consider that mineral extraction from the proposed site is likely to be acceptable in planning terms subject to the following issues having been addressed satisfactorily, which include:

- 1) An assessment of how the site would be developed and operated in such a way that the local community and environment are protected from significant adverse impacts, taking account of the following. Properties at Twyford have partial views across the river of part of the site. A residential nursing home adjoins the site to the west and has open views of the western part of the site. There are seven properties at the converted Old Waterworks and three at the converted New Waterworks which have open views of the site. There are also views from Anchor Church (historic caves) to the south-east of the site boundary and from a few properties in Ingleby and Foremark, including Foremark Preparatory School and also from Ingleby Road. A Public Right of Way (PROW) runs along the eastern boundary of the site and this forks to the north-west through the site. Meadow Lane is also a PROW, which is used on a frequent basis. The majority of the site is visible from these PROW.
- 2) An ecological assessment of any designated sites, habitats, fauna and flora present on or adjacent to the site and/or potentially impacted by the site's development, and an evaluation of the impact of development upon species and habitats present on or adjacent to the site, and on the wider ecological network. Hedgerows are intact and close cut, but are species poor, lacking notable hedgerow trees. Prominent trees and mixed species hedge (oak and some poor ash) associated with the green lane on the eastern boundary of the site. A stream runs west to east, lined with mature alder/willow. Some palaeochannels exist in improved pasture. Although limited in extent there remain some valuable characteristic habitats of a Natural Area.
- 3) An assessment of the effects on the historic environment, including designated sites and settings and archaeological remains. In terms of designated sites, Grade II Listed 'Anchor Church' is close to the site, with designed views over the extraction site associated with the cave's re-interpretation within the 18th century park at Foremark Hall. In terms of archaeology, there is possibly some remnant ridge and furrow and indications of the parish boundary. There are also visible palaeochannels within the site.

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- 4) An assessment of the effects of the development on the water environment. The site lies in flood zone 3 which has the highest possibility of flooding but in accordance with PPG, sand and gravel working is classed as water compatible development, which is classified appropriate development in flood zone 3.
- 5) An assessment of the landscape and visual impact of the site, including the provision of suitable landscaping measures. In terms of the landscape, the site is poorly representative of the established character of the Riverside Meadows Landscape Character Type, with large parts of the site now down to arable or improved pasture. Hedgerows are mostly intact and close cut, generally species poor and lacking in notable hedgerow trees. The most prominent trees (oak and some poor quality ash) are associated with the green lane on the eastern boundary of the site and connects to the river. There is some localised ridge and furrow and palaeochannels within areas of improved pasture and a small section of mixed species hedgerow associated with the green lane. Overall, the landscape character is considered to be weak, although there are some attractive features, some of which are in good condition. In terms of visual impact, there are a number of residential properties in close proximity to the site which will need to be considered. The undulating topography to the south screens the majority of site from Repton and Milton. A Public Right of Way (PROW) runs along the eastern boundary of the site and this forks through the north-west section of the site. Meadow Lane, which forms the western boundary of the site is also a PROW. The majority of the site is visible from both of these public rights of way.
- 6) A Transport Assessment would need to accompany any application to assess the access to this site and the impact of traffic generated by the site on the surrounding highway network. It is expected that this site would be worked through the existing plant and access arrangements so the impact on the surrounding area in this respect is likely to be unchanged.
- 7) An account of the mitigation and compensation measures required to address environmental impacts, and of the biodiversity enhancement opportunities arising from the development, including its restoration and aftercare.
- 8) The restoration of the site should take into account the Restoration Strategy for the Trent Valley, as set out in Policy SP25 to ensure that the wider context of the valley is taken into account in developing a coordinated and strategic approach to the restoration of the site.

## ELVASTON

### Background

- A23** The 50-hectare site is proposed as an extension to the existing quarry. It is located within the Green Belt to the north-west of the yet to be worked site, which received planning permission for sand and gravel extraction in 2013 and would continue the westerly movement of Elvaston Quarry along the Derwent Valley.
- A24** The site boundaries are well defined, its eastern boundary following the western boundary of the recently permitted area, its northern boundary follows the River Derwent, its western boundary follows the B5010 and its southern boundary follows an existing hedgerow. The northern part of the site, south of the River Derwent and directly north-east of Elvaston Castle, comprises unimproved pasture and remnant hedgerows. The central area is predominantly arable fields with improved pasture to the south. There are occasional scattered trees of varying age and condition, a group of willows and evidence of lost hedgerows. Hedgerow condition is very variable.
- A25** It is proposed to work some 1,500,000 tonnes of sand and gravel from a net excavation area measuring 40ha i.e. an estimated yield of tonnes per hectare 37,500 tph. The average depth of the deposit is 2.5 metres.
- A26** The estimated yield figure would be 1,500,000 tonnes. With a proposed annual output of around 300,000, this would give a lifespan for the site of approximately 5 years. The proposed timings of the workings are currently unknown.
- A27** The site would be worked as the current site but with an extended conveyor system to serve this area. The site would be worked through the existing plant, which would need to be refurbished, and utilising existing access arrangements. Access to the plant site would be gained via a new conveyor tunnel to be constructed under Ambaston Lane and via an over ground conveyor through 'Elvaston Avenue' and across a culvert to be constructed over Ambaston Brook. All lorries would leave the plant site via the existing access road and would turn right, onto London Road, joining the main road network at Thulston Roundabout. No delivery vehicles would pass through Shardlow, or travel on Ambaston Lane or the B5010 to Borrowash.
- A28** Restoration is likely to be mainly to water-based uses with a high nature conservation/biodiversity component.

## PRINCIPAL PLANNING REQUIREMENTS

**A29** The MPAs have carried out an assessment of the promoted site as part of the preparation of the local plan and consider that mineral extraction from the proposed site is likely to be acceptable in planning terms subject to the following issues having been addressed satisfactorily, which include:

- 1) An assessment of how the site would be developed and operated in such a way that the local community and environment are protected from significant adverse impacts, taking into account the location of the site within the Green Belt and therefore the need to maintain the openness of area. Some properties on the southern edge of Borrowash, may have views across the northern part of the site. Beechwood camping/caravan site which lies to the south of the site would be screened by trees/hedgerows on its northern boundary. There are open views from several residential properties and from the main entrance to Elvaston Castle and Country Park which lie immediately across the road which forms the western boundary.
- 2) An ecological assessment of any designated sites, habitats, fauna and flora present on or adjacent to the site and/or potentially impacted by the site's development, and an evaluation of the impact of development upon species and habitats present on or adjacent to the site, and on the wider ecological network. There is unimproved pasture and remnant hedgerows on the northern part of the site adjacent to the River Derwent. Arable fields are in the centre of the site and improved pasture to south. There are occasional scattered trees of varying age and condition and a group of willows and evidence of lost hedgerows. The condition of hedgerows is generally variable. There are no records of designated wildlife sites.
- 3) An assessment of the effects on the historic environment, including designated sites and settings and archaeological remains. In terms of designated sites and settings, Elvaston Castle Country Park is situated across the road from the site's western boundary and forms a well-used and valuable local recreational amenity. The Castle and Gardens are Grade II\* Listed Buildings. The Eastern Avenue, which adjoins the southern boundary is an integral component of the gardens. In terms of archaeology, there are some remnants of ridge and furrow adjacent to the river. There are vestigial remains elsewhere of once very extensive open fields. There are palaeochannels adjacent to the river which may have considerable potential.

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- 4) An assessment of the effects of the development on the water environment. The site lies in flood zone 3 which has the highest possibility of flooding but in accordance with PPG, sand and gravel working is classed as water compatible development, which is classified appropriate development in flood zone 3.
- 5) An assessment of the landscape and visual impact of the site, including the provision of suitable landscaping measures. The northern part of the site directly south of the River Derwent and north-east of Elvaston Castle comprises of unimproved pasture with remnant hedgerows. The central area is predominantly arable fields with improved pasture to the south. There are occasional scattered trees of varying age and condition, a group of willows and evidence of lost hedgerows. Hedgerow condition is very variable. The proposed site has a few characteristics that accord with the established character of the Riverside Meadows and the condition is considered to be generally poor.
- 6) A Transport Assessment would need to accompany any application to assess the access to this site and the impact of traffic generated by the site on the surrounding highway network. It is expected that this site would be worked through the existing plant and access arrangements so the impact on the surrounding area in this respect is likely to be unchanged.
- 7) An account of the mitigation and compensation measures required to address environmental impacts, and of the biodiversity enhancement opportunities arising from the development, including its restoration and aftercare.
- 8) The restoration of the site should take into account the Restoration Strategy for the Trent Valley, as set out in Policy SP25 to ensure that the wider context of the valley is taken into account in developing a coordinated and strategic approach to the restoration of the site.

## ALDWARK SOUTH

### Background

- A30** The long established Brassington Moor Quarry, operated by Longcliffe Quarries Ltd, lies within the Carboniferous Limestone Resource centred on the Matlock/Wirksworth area. The quarry complex straddles the B5056 Grangemill to Longcliffe road, it comprises to the south of the road the processing plant together with three of the four quarry units known as Main, Barnfield and Pyro quarries. To the north of the road and linked to the rest of the quarry and processing plant by an under-road tunnel, is the fourth unit known as Aldwark quarry. The proposed allocation site is an extension to this quarry and is known as Aldwark South. To the immediate east of the main quarry complex and sharing a common boundary is Grangemill Quarry.
- A31** Longcliffe Quarries Ltd primarily produces high purity limestone for specialist markets; the limestone is processed via on site processing plant and despatched off site in dedicated road tankers/transport. Some of the products produced require exacting specifications which impacts on the suitability of reserves at the quarry and dictates that extraction operations take place at various locations within the quarry complex dependent on customers' requirements.
- A32** Every tonne of stone lifted from the quarry face contains the full range of stone types to some degree. To deal with these complexities there is a continual quality monitoring and matching control system that streams from the deposit to each plant and its end use. Historically, the business has been developed using the benefit of three or four different quarries in each of which may be two extraction benches are working. Typically, this allows 6 or 8 choices of source stone; it is not practicable to open more than two benches per quarry.
- A33** The Company essentially produces dried, milled and classified calcium carbonate powders and granules. These are crucial raw materials for the production of animal feed, glass, sealants and adhesives, mastics, plastics and rubber. It also produces bright (white) dusts for precast concrete products and significant volumes of agricultural lime. By-products from these mainstream products are also sold for construction uses. Production rates have increased in recent years averaging above 1mt with approximately 70% used for industrial purposes and 30% used for aggregates.

A34 The need for additional reserves during the plan period is to provide mineral that is low in cadmium, iron and lead which occur at different locations and depths throughout the quarry but which are vital for the production of animal feed products and for use in glass manufacture. The Company estimates that these reserves will be exhausted between 2025 and 2031. It is promoting an extension to the quarry, Aldwark South which measures 25 Ha and would yield approximately 24 mt of reserve. Exploration has concluded that the geology of the proposed extension is very similar to the area currently being worked; overall the reserve has a very high calcium carbonate content and would yield 18% low cadmium reserves, 19% low iron reserves and 63% low lead reserves. The reserves would be worked and processed via the existing permitted plant and access arrangements.

## PRINCIPAL PLANNING REQUIREMENTS

A35 The MPAs have carried out an assessment of the promoted site as part of the preparation of the local plan and consider that mineral extraction from the proposed site is likely to be acceptable in planning terms subject to the following issues having been addressed satisfactorily which include:

- 1) An assessment of how the site would be developed and operated in such a way that the local community and environment are protected from significant adverse impacts – The nearest communities are the villages of Aldwark and Longcliffe which lie approximately 500 metres away to the north and south west of the site respectively. The hamlet of Ible lies on the hillside above the Via Gellia some 1.5km away to the east of the site. Residential and industrial uses are present at Manor Farm which lies some 350m to the south of the site. There are two important long distance recreational routes, the High Peak Trail which forms part of the Midshires Way and the Limestone Way which lie to the south and east of the site at approximately 500 and 400 metres respectively. Harboro Rocks viewpoint lies some 1km to the south east of the site. The Peak District National Park boundary abuts the north western corner of the promoted site which forms part of the wider setting of the National Park.

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- 2) An ecological assessment of the designated sites, habitats, fauna and flora present on or adjacent to the site and/or potentially impacted by the site's development, and an evaluation of the impact of development upon species and habitats present on or adjacent to the site, and on the wider ecological network - The promoted site does not include any land designated for its ecological interest. The key ecological receptors in this area are the ancient woodlands of the Via Gellia SSSI/SAC complex which lies approximately 1km to the east of the site. A small area of woodland protected by a Tree Preservation Order (TPO) is located on the site and other TPOs are located close by. Habitats within the site appear to consist of managed farmland unlikely to be of significant ecological interest in its own right, although great crested newts have been recorded from within and adjacent to the site. Impacts on this European Protected Species would need consideration and mitigation as part of any planning application, if a need is proven.
- 3) An assessment of the effects on the historic environment including designated sites and settings and archaeological remains – the promoted site does not contain any designated historic sites or earthworks. However these upland areas are characterised by finds of prehistoric tools and roman pottery which can indicate settlement. Some prehistoric finds are known from the site and immediate surroundings and therefore the potential for archaeological interest needs to be taken into account and appropriately mitigated.

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- 4) An assessment of the effects of the development on the water environment – the site lies in flood zone 1 which has the lowest possibility of flooding and in accordance with PPG mineral working is classed as ‘less vulnerable’ development which is appropriate development in zone 1. However mineral working should not increase flood risk elsewhere and needs to be designed, worked and restored accordingly. The site lies on Carboniferous Limestone which is classed as a major aquifer and within a Groundwater Source Protection Zone 1 for a public water supply. Protection zones are designated for important groundwater abstraction sources such as wells, boreholes and springs used for drinking water supply. It is important, within these zones, not to interrupt the flow or to pollute the groundwater. Planning proposals will need to be able to demonstrate that the proposal does not pose an unacceptable risk to the water regime and that any adverse impacts can be adequately mitigated.

Additionally the current planning permission<sup>204</sup> which the quarry operates under, is subject to a section 106 agreement which requires the off-site monitoring of surface water in relation to any impacts of working on the wider Via Gellia/ Peak District Dales SSSI/SAC ecological complex; this matter will need to be addressed in any planning application. The HRA undertaken to support the Plan indicates that as a safeguard an updated hydrological study should be undertaken to reaffirm that no adverse effect on the Via Gellia stream (and thus no likely significant effect on wider Via Gellia/Peak District Dales SSSI/ SAC ecological complex) will arise. It also advises that the off-site monitoring of surface water required under a section 106 agreement should continue.

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restoration of the whole site, granted 24 12 2008.

205 Paragraph 1(3) of Schedule 8 to the Planning and Compulsory Purchase Act 2004

5) An assessment of the landscape and visual impact of the site including the provision of suitable landscaping measures – the initial assessment concluded that there would be potentially significant adverse effects on sensitive visual receptors including recreational users of the High Peak Trail, Limestone Way and Harboro Rocks including locations that get little or no view of the current quarry development. There may also be some visual impacts on isolated properties close to Aldwark including Middle Hills Farm camping and caravan site and the village of Ible; additionally there are footpaths and roads in these areas from which the promoted site may be visible. Any impacts will also be in the context of the existing quarry and the adjoining Grangemill quarry which already exert significant adverse visual effects on surrounding sensitive visual receptors. The promoted site abuts the PDNP boundary forming part of its immediate setting and large parts of the site will be clearly visible from it.

Following on from this assessment, further work has been undertaken by the Operator in liaison with the County Council to provide more detail on the potential impact of working the site on the surrounding visual receptors/ landscape including impacts on the PDNP. The photographic material and Zone of Theoretical Visual (ZTV) analysis confirms that visual impacts are likely to be confined to the local landscape with receptors to the south and south-east most likely to be affected by the proposed allocation especially those recreational users of the High Peak Trail, Limestone Way and Harboro Rocks. There are vantage points to the north, within the Peak District National Park, where the allocation area is also visible but this visibility would be confined to the north- western extent of this area and would be viewed at distance and within the context of the established quarry complex. A ‘Mitigation Strategy’ has been submitted by the Operator containing a range of techniques that could be applied to the progressive working and restoration of the site to assist in mitigating those impacts.

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Key techniques that any planning application to work the site would need to include are:

- A phased sequence of working and restoration which prioritises early rollover restoration of the western perimeter face;
- Temporary screen bunds which take advantage of the local topography to temporarily reduce the visibility of the extraction areas;
- A strategy for tree and woodland planting along the B5056 corridor which reflects the DCC and PDNPA strategies for the local landscape character including:
  - Further improvement to planting around the Curzon Lodge site to mitigate cumulative impacts;
  - Retention of the woodland/coppice block close to the southern boundary of the extension area for as long as possible as part of the phased development of the area;
  - Woodland planting on the western and southern boundaries of the proposed allocation site;
  - Planting in key areas of the landscape to the east of the B5056;
- A comprehensive management plan for all new tree planting and existing tree planting associated with the quarry site to take into account the impact of Chalara ash die back;
- Introduction of a diverse habitat mix through the implementation of a pre- designed 'green infrastructure' strategy which includes areas of calcareous grassland where appropriate and particularly on steeper slopes in accordance with the PDNPA White Peak Landscape Character Area Strategy.

The mitigation of landscape and visual impacts on sensitive receptors and the PDNP is a key issue that any planning application would need to address.

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- 6) A transport assessment including an assessment of the existing access arrangements and the potential impact upon the Strategic Road Network – the last planning permission for a major extension to the existing quarry was granted in 2007 when a comprehensive assessment of transport matters took place. Since then, the Company has indicated that the level of vehicle movements has doubled from 100 to 200 loads a day (400 in/out movements). The increase in movements is attributable to both an increase in production, since 2007, from averaging below 1 mt to consistently averaging above 1 mt in recent years and the diversification of markets served by the Company. The County Council as Highways Authority has raised concerns about the continuation of the significant increase in lorry movements. It has raised two particular issues; emerging vehicle visibility at the junction of B5056 and the A5012 and potential congestion and negative impacts on Cromford Conservation Area, from HGVs travelling west along the Via Gellia to join the A6. Both issues will need to be satisfactorily addressed in detail in a Transport Assessment to accompany any planning application. The current quarry operates under planning permission granted in 2007 and is subject to a Section 106 agreement which requires the operator to pay an annual sum of money towards maintaining a portion of the highway directly outside the quarry entrance. The continuation of this agreement would need to be addressed as part of any planning proposals to work the proposed allocated site.
- 7) An account of the mitigation and compensation measures required to address environmental impacts, and of the biodiversity enhancement opportunities arising from the development, including its restoration and aftercare - the key ecological resources in this area are ancient woodlands and species rich calcareous grasslands set within a managed pastoral landscape. If soil resources are managed, site restoration should offer the opportunity to deliver restoration to grasslands which should be calcareous and species rich with opportunities for woodland creation if deemed desirable. Restoration of or natural generation on benches could offer additional complementary habitat gains. There is potential for site restoration to deliver net gain for biodiversity through habitat creation which would add to resources within the wider area, without necessarily directly enhancing existing habitat corridors.

## APPENDIX B: MINERALS SITES IN THE PLAN AREA

- B1** This Appendix provides brief details of permitted mineral sites within the Plan area. Sites are listed within the District/Borough Council area in which they are located. Minerals produced include limestone, sandstone, sand and gravel, vein minerals and brick clay.

### HIGH PEAK

#### Dove Holes Quarry

- B2** Operated by Cemex, lies on the Carboniferous Limestone to the east of Dove Holes village which itself lies to the north east of Buxton. It is a large quarry covering some 213 Hectares, including a small area (22 Ha) within the PDNP. The quarry area is a combination of three long established quarries known individually as Bee Low, Peak Quarry and Holderness, all of which were developed in the first half of the twentieth century. Production at the quarry is focused on the aggregate market; annual production is estimated at 5 mt with approximately 50% transported by rail. Permitted reserves are sufficient to last well beyond the end of the Plan period in 2038. The quarry complex provides the location for several companies making mineral products using the raw materials from the quarry.

#### Tunstead Quarry

- B3** Operated by Tarmac, lies on the Carboniferous Limestone resource to the east of Buxton. The site consists of two quarries Tunstead and Old Moor (part of which lies within the PDNP). It is an important producer of both aggregate and industrial limestone and contains one of the Country's eleven only cement plants with a production capacity of 1 million tonnes (mt) of cement. It has permission for a second cement plant which if developed would increase capacity to 2.15 mt. Annual mineral production is estimated at around 6 mt ; with approximately 50% transported by rail. The site has sufficient reserves to last beyond the end of the Plan period.

#### Dowlow Quarry

- B4** Operated by Breedon Southern Ltd, lies south-east of Buxton at Sterndale Moor, and is the southernmost of four quarries lying between the A515 Buxton to Ashbourne road and the PDNP boundary to the west. Its carboniferous limestone is quarried for both industrial and aggregate purposes with annual production estimated at 3.5 mt. Approximately 50% of material is transported by rail. The site has sufficient permitted reserves to maintain production throughout the Plan period.

## Hindlow Quarry

- B5** Operated by Tarmac, is located to the north west of Dowlow. The quarry has not been producing limestone since 1988 although the lime manufacturing plant has continued to be operational since that time, initially utilising onsite stockpiles of stone and later, limestone imported from Tunstead Quarry. More recently extraction has restarted to supply the lime manufacturing plant and the aggregates market. The established rail network is being used to distribute approximately 50% of aggregates whilst the industrial lime products continue to be distributed by road. Future working is estimated at 2mt per annum with permitted reserves sufficient to last well beyond the Plan period.

## Brierlow Quarry

- B6** Operated by Lhoist UK Ltd, north west of Hindlow is the third adjoining quarry in this area. The operation is primarily focused on the production of industrial lime. The site is bisected by a railway line (mostly tunnel) however there is no rail link to the site. Annual production is estimated at 0.5 mt with sufficient permitted reserves to last beyond the Plan period.

## Hillhead Quarry

- B7** Operated by Tarmac, is the fourth in the line of quarries to the south of Buxton. The site, which is located on the northern slopes of a prominent ridge line, has a surface area of 129 hectares (ha). The quarry's northern boundary is a mineral railway which serves the quarries on the A515 but is not actively used by Hillhead at present. A small area of the site, in its south-eastern corner, is in the Peak District National Park. Full time quarrying operations were mothballed in 2000 and the site has only been intermittently worked since. Indications from the operator are that quarrying is likely to recommence during the Plan period. The operator is also pursuing obtaining access to the mineral railway. Production is anticipated at 0.5 mtpa mainly for aggregate purposes, permitted reserves are estimated to last well beyond the Plan period.

## Ashwood Dale Quarry

- B8** Operated by Breedon Southern Ltd, is located to the south of Buxton on the Carboniferous Limestone. Annual production is estimated at 100,000 tonnes used for the aggregate market. Permitted reserves are sufficient to last throughout the Plan period. All production is transported by road.

## Mouselow Quarry

- B9** Operated by Weinerberger Ltd, is located to the north of Glossop. The quarry is an important provider of brick clay supplying approximately 50% of the raw material required at the operator's brickworks located at Denton, East Manchester. Annual production from the quarry is estimated at 45,000 tonnes and permitted reserves are estimated to last throughout the Plan period. The quarry also supplies sandstone for use as building stone and a small amount of aggregate. Annual production of sandstone is estimated at 10,000 tonnes.
- B10** There are two sandstone quarries at **Birch Vale** and **Hayfield** where sandstone is worked intermittently for aggregate/building stone purposes.

## DERBYSHIRE DALES

### Grange Mill Quarry

- B11** Wirksworth is operated by Ben Bennet Jnr Ltd extracts Carboniferous Limestone mainly for industrial purposes but also for aggregate use. Production has been estimated at 300,000 tonnes per year with permitted reserves sufficient to last throughout the plan period. All production is transported by road.

### Brassington Moor Quarry

- B12** Operated by Longcliffe Quarries Ltd, adjoins Grange Mill Quarry to the south west on the Carboniferous Limestone resource. Mineral is principally quarried for the industrial market but also for aggregate purposes as well. Annual production is estimated at 1mt with approximately 70% used for industrial purposes and 30% used for aggregates. The quarry has permission until 2035, however the operator estimates that reserves that are low in cadmium, iron and lead which are vital for animal feed products and glass manufacture will be exhausted between 2025 and 2031. It is promoting an extension to the quarry, Aldwark South which measures 25 Ha and would yield approximately 24 mt of reserve. This site is proposed for allocation in this Plan.

### Bonemill Quarry

- B13** operated by Longcliffe Quarries Ltd, lies to the east of Wirksworth. Dolomitic limestone is worked at the quarry for both industrial and aggregate purposes. Annual production is estimated at around 800,000 tonnes; the site had sufficient permitted reserves to last throughout the Plan period.

### Dene Quarry

- B14** operated by Tarmac, lies to the west of Cromford. It produces approximately 0.5 mt of Carboniferous Limestone for use in the aggregates market. All mineral is transported by road. Access to the site is shared with Slinger Top Quarry. Permitted reserves are estimated to be sufficient to last throughout the Plan period.

## Slinter Top Quarry

**B15** Operated by Slinter Mining Company, lies to the west of Cromford on the Carboniferous Limestone where vein minerals are quarried alongside limestone aggregates with the resulting void infilled with inert, non-hazardous excavation materials. Annual production is estimated at 100,000 tpa; all produced mineral is transported by road with the vein mineral transported to Cavendish Mill in the PDNP for processing. Mineral extraction is permitted at Slinter Top until 31st December 2021 and infilling until 31st December 2032. A planning application has been submitted (yet to be determined) to extend working until 2031.

## Ball Eye Quarry

**B16** Operated by Deepwood Mining, is located close to Bonsall. The quarry is currently non-operational but the site has permission to extract limestone for aggregate purposes with vein mineral quarried as ancillary mineral.

**B17** There is a non-operational sandstone quarry at **Halldale**, Darley Dale where sandstone has been quarried intermittently for building stone purposes.

## BOLSOVER

### Whitwell Quarry

**B18** Operated by Tarmac, lies on the Permian Limestone resource located in the north east of the County. The quarry produces around 1mt of mineral per annum. Approximately half of the mineral produced is high quality dolomitic limestone used at the adjacent Whitwell Works, operated by Lhoist which produces products for use in the steel industry. The remaining 50% is used for aggregates purposes. The current planning permission expires in 2025, the Company is exploring sites in both Derbyshire and Nottinghamshire to continue to supply the works.

### Bolsover Moor Quarry

**B19** Owned by Tarmac, is a non-operational quarry located on the Permian Limestone to the east of Bolsover. When in production the site mainly supplied the aggregates market with production around 200,000 tpa. The contribution that this quarry will make to supply over the Plan period is uncertain.

## NORTH EAST DERBYSHIRE

**B20** There is a sandstone quarry at **Moorhay Farm** where sandstone is worked intermittently for building stone purposes.

## AMBER VALLEY

### Waingroves Quarry

- B21** Operated by Forterra Building Products Ltd, lies to the south of Ripley. Approximately 60,000 tonnes of brick clay are excavated annually for use as blending material in the Companies brick works located at Kirton in Nottinghamshire and Desford in Leicestershire. Permitted reserves are estimated to be sufficient to last throughout the Plan period.
- B22** There is a sandstone quarry **Dukes Quarry**, Whatstandwell where sandstone is worked intermittently for building stone purposes.

## SOUTH DERBYSHIRE

### Elvaston Quarry

- B23** Operated by Tarmac, lies on the sand and gravel resource in the Lower Derwent Valley. Elvaston Quarry was first established in the late 1960s when permission was granted near to Draycott; workings have moved westwards along the valley. The current permitted extraction area, granted in 2013, lies north of Ambaston Lane; this permission retains the processing plant site at Bellington Hill and access arrangements onto the A6. This area has not been worked and the site is currently non-operational, but it is anticipated to recommence working towards the end of this decade. Permitted reserves are anticipated to be worked over a 5-year period at an average annual output of 300,000 tonnes; an extension to this area is proposed for allocation in the Plan to provide sufficient mineral to maintain production throughout the Plan period.

### Shardlow Quarry

- B24** Operated by Hanson, is located on the sand and gravel resource, in the Trent Valley, to the south of Shardlow village. The quarry became operational in 1989; it has a direct private access from the A50 which bisects the northern part of the site. The current working area was granted permission in 2015; annual production is anticipated at 350,000 tpa with permitted reserves anticipated to be worked out by the end of this decade. Hanson is promoting a replacement site at Foston which lies in the Dove Valley. This site is proposed for allocation in the Plan; working is anticipated to commence in 2030 with annual production estimated at 400,000 tpa.

## Swarkestone Quarry

**B25** Operated by Tarmac, lies in the Trent Valley on the sand and gravel resource. The extraction of sand and gravel has taken place in the Swarkestone area since the late 1940s with working extending from the original site in a westerly direction along the valley. The current plant site lies to the south of Barrow on Trent village and was established in the mid-1990s; annual production is estimated around 300,000 tpa with permitted reserves anticipated to be worked out by the end of this decade. An extension to the west of the current permitted area, known as Swarkestone South is proposed for allocation in the Plan which would extend the life of the site towards the end of the Plan period in 2036. To ensure continuity of production a further extension is proposed to the north west of this allocation known as Swarkestone North which would enable production to be maintained beyond the Plan period.

## Willington Quarry

**B26** Operated by Cemex, lies on the sand and gravel resource in the Trent Valley to the south west of Willington. The working of sand and gravel in the Willington area has taken place by a number of operators since the 1960s. The current plant area was established in the late 1980s. A recent permission has been granted, in August 2021, for an extension to the site which is anticipated to maintain working until 2024 based on an estimated annual production of 350,000 tonnes. Cemex are promoting a replacement site at Sudbury which lies in the Dove Valley. This site is proposed for allocation in the Plan; working is anticipated to commence in 2025 with annual production estimated at 250,000.

## Mercaston Quarry

**B27** Operated by Hanson, lies on the Sherwood Sandstone and comprises five separate areas. A processing plant and ancillary facilities are located off Mercaston Lane. The site has not been fully operational for a number of years with only small quantities of mineral produced annually. Based on this small quantity of output permitted reserves are sufficient to last well beyond the Plan period.

## APPENDIX C: SAVED POLICIES OF THE ADOPTED MINERALS LOCAL PLAN TO BE REPLACED

C1 The new Derbyshire and Derby Minerals Local Plan when adopted will replace the 'saved'<sup>205</sup> policies of the current Derby and Derbyshire Minerals Local Plan adopted in 2000 with a first alteration adopted in 2002. A list of the saved polices is set out below:

Policy Number	Policy Name
MP1	The Environmental Impact of Mineral Development
MP2	The Need for Mineral Development
MP3	Measures to reduce Environmental Impact
MP4	Interests of Acknowledged Environmental Importance
MP5	Transport
MP6	Nature Conservation - Mitigation Measures
MP7	Archaeology - Mitigation Measures
MP10	Reclamation and After-Use
MP11	Borrow Pits
MP12	Mineral Related Development
MP13	Mineral Exploration
MP15	Reworking of Tips
MP16	Maintenance of Landbanks
MP17	Safeguarding Resources
MP18	Extensions to Sites
MP19	Additional Sites
MP21	Sand and Gravel Sites
MP22	Sherwood Sandstones
MP23	Crushed Rock for Aggregates
MP24	Secondary and Recycled Materials
MP25	Industrial Limestone
MP27	Coal Extraction and Colliery Spoil Disposal
MP28	Opencast Constraint Areas
MP29	Coal Stocking
MP32	Clay
MP33	Vein Minerals
MP34	Building Stone
MP35	Oil and Gas

# APPENDIX D: DOCUMENTS THAT FORM PART OF THE PROPOSED DRAFT PLAN CONSULTATION STAGE

- D1 The preparation of the Minerals Local Plan requires the preparation of a number of supporting technical documents and assessments as well as the main Plan document. A list of the documents which form part of this Proposed Draft Consultation is set out below:

## MAIN DOCUMENT

- D2 Derbyshire and Derby Minerals Local Plan - Proposed Draft Plan, December 2021

## BACKGROUND PAPERS

- D3 (The preceding number is the Proposed Draft Plan Chapter to which the Paper relates to)

- 2.0 Spatial Overview
- 5.0 Climate Change
- 6.1 Secondary and Recycled Aggregates
- 6.2 Sand and gravel
- 6.3 Crushed Rock
- 7.1 Building Stone
- 7.2 Industrial Limestone
- 7.2 Industrial Limestone Cement
- 7.3 Brick Clay and Fireclay
- 7.4 Vein Minerals
- 8.1 Coal and Colliery Spoil
- 8.2 Oil and Gas Conventional
- 8.2 Oil and Gas UnConventional
- 8.2 Gas from Coal
- 9.1 Safeguarding Mineral Resources
- 9.2 Safeguarding Minerals Infrastructure
- 11 Cumulative Impacts

## DEVELOPMENT PAPERS

- D4 (The preceding number is the Proposed Draft Plan Chapter to which the Paper relates to)
- 3 Strategic Priorities - Vision and Objectives
  - 4 Sustainable Minerals Development
  - 5 Climate Change
  - 6.1 Secondary and Recycled Aggregates
  - 6.2 Sand and gravel
  - 6.3 Crushed Rock
  - 6.4 Reducing the supply of aggregates from the PDNP
  - 7.1 Building Stone
  - 7.2 Industrial Limestone
  - 7.3 Brick Clay and Fireclay
  - 7.4 Vein Minerals
  - 8.1 Coal and Colliery Spoil
  - 8.2 Hydrocarbons
  - 9.1 Safeguarding Mineral Resources
  - 9.2 Safeguarding Minerals Infrastructure
  - 10 Restoration of sand and gravel sites in the Trent Valley
  - 11 Development Management incorporating mineral related issues and restoration of carboniferous limestone sites

## DUTY TO COOPERATE (DTC)

- D5 DtoC Introduction and Overview  
DtcC Statement of Common Ground

## REPRESENTATIONS

- D6 Report of Representations on 2018 and Sand and Gravel Consultation 2020

## ASSESSMENTS

- D7 3rd Interim Sustainability Appraisal (Assesses 2018 Consultation and Sand and Gravel Sites that formed part of the Sand and Gravel Consultation 2020)
- 4th Interim Sustainability Appraisal
  - Strategic Transport Assessment Stages 1 and 2
  - Habitats Regulations Assessment
  - Sand and Gravel Sites Assessments (incorporating Sudbury)
  - Strategic Flood Risk Assessment Stage 1

## GLOSSARY

**Aftercare:** Processes necessary to maintain the quality of restored land to provide suitable conditions for determined after-uses such as conservation or agriculture.

**After-use:** The final use of land after the completion of mineral working and restoration such as nature conservation areas, country parks, agriculture, forestry, industrial uses, and other development i.e., housing developments.

**Aggregates:** Granular materials formed of loose fragments sand and gravel, crushed rock and other bulk materials used by the construction industry for purposes such as the making of concrete, mortar, asphalt or for roadstone, drainage or bulk filling.

**Air Quality Management Areas (AQMA):** An area unlikely to achieve national air quality objectives by relevant deadlines identified by the Local Authority. The Local Authority is subsequently required to put together a plan to improve air quality in that area – a Local Air Quality Action Plan.

**Amenity:** A positive element or elements that contribute to the overall character or enjoyment of an area. For example, open land, trees, historic buildings and the inter-relationship between them, or less tangible factors such as tranquillity.

**Area of Search:** Areas where knowledge of mineral resources may be less certain but within which planning permission may be granted, particularly if there is a potential shortfall in supply.

**Bedrock Geology:** Is the term used by British Geological Survey to describe the main mass of rocks, present everywhere that form the Earth. Bedrock can be either exposed or concealed.

**Best and Most Versatile Land:** Land in grades 1, 2, and 3a of the Agricultural Land Classification. Land, which is the most flexible, productive and efficient, which can best deliver future crops.

**Biodiversity:** Refers to the biological diversity of all life on earth. It identifies the range of ecosystem variations, genetic differences and species, including both plants and animals.

**Borrow Pit:** A temporary site where minerals are extracted to supply materials for a specific project.

**Buffer Zones:** Land designated for protection where mineral development is prohibited. Usually found around settlements to protect residents from the adverse effects of site workings.

**Building Stone:** Hard rock types that can be used directly from mining for a variety of applications in construction, such as walling, flagstones, roofing and masonry. Rock type includes limestone and sandstone.

**Bund:** A retaining wall or embankment that can be used to screen mineral development.

**Climate Change:** The long-term change to Earth's climate. A change in global or regional weather patterns, such as precipitation or temperature. It is thought that recent changes in Earth's climate have been influenced by human activities rather than being a natural occurrence.

**Coal:** A fossil fuel used in energy production, mainly formed from carbonised organic matter.

**Conservation Area:** Those areas which represent ‘special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance under the Planning (Listed Buildings and Conservation Areas) Act 1990’

**Cumulative Impact:** A number of developments in a locality or a continuous activity over time that together may have an increased impact on the environment, local community or economy.

**Development:** “the carrying out of building, engineering, mining or other operation in, on, over or under land, or the making of any material change in the use of any building or other land” as defined in the 1990 Town and County Planning act. Most mineral development requires planning permission.

**Development Plan:** Defined in section 38 of the Planning and Compulsory Purchase Act 2004, and includes adopted local plans, neighbourhood plans that have been made and published spatial development strategies, together with any regional strategy policies that remain in force. Neighbourhood plans that have been approved at referendum are also part of the development plan unless the local planning authority decides that the neighbourhood plan should not be made. These are fundamental documents that identify key goals for development.

**Dormant Mineral Site:** A mineral site officially classed as dormant under the Environment Act 1995 or the Planning and Compensation Act 1991. The permitted reserve cannot be exploited until new planning conditions have been agreed hence they are not included in landbank calculations of permitted reserves.

**Duty to Cooperate:** An important element of local plan preparation is the requirement to fulfil the Duty to Co-operate provisions established by the Localism Act 2011 and as set out in Section 33A of the Planning and Compulsory Purchase Act 2004. It places a duty on local planning authorities (including County Councils) and prescribed public bodies to engage, on an ongoing basis, to maximise the effectiveness of a local plan in the context of strategic matters that cross administrative boundaries. Evidence of the discussions and the outcomes from them, will need to be made available at the local plan examination as part of the test of soundness.

**Energy Minerals:** Minerals used for energy production, usually by burning. They have high levels of carbon and include coal, oil and gas.

**Environment Agency (EA):** The principle environmental regulatory body in England and Wales. It strives to protect and enhance the environment; it supports sustainable development and aims to create better places for both people and wildlife.

**Environmental Impact Assessment (EIA):** Investigation on development policies to establish full knowledge of any likely significant effects on the environment. Which can then be used in decision making processes.

**Equalities Impact Assessment (EqIA):** Used to assess the impact of the plans policies on groups of individuals with protected characteristics. Demonstrates the plan does not discriminate and ensures equality.

**Evidence Base:** Information and data collected by local authorities, used to make informed decisions on plan preparation.

**Floodplain:** an area of land identified as at risk of flooding when a river bursts its banks.

**Flood Zones:** Area identified by the Environment Agency as being at risk of flooding. Categorised into 3 zones, zone 3 being the highest risk.

**Geodiversity:** The range of rocks, minerals, fossils, soils and landforms.

**Green Belt:** Specially designated area protected from most forms of development in order to stop urban sprawl and the coalescence of settlements, preserve the character of existing settlements and encourage development to locate within existing built-up areas.

**Groundwater:** An important part of natural water cycle, groundwater is found underground, stored in soil and rocks.

**Habitats Regulation Assessment (HRA):** Investigation to identify any aspects of planned land-use that could have significant impact on designated European sites. These sites include Special areas of Conservation (SACs), candidate SACs, Special Protection Areas (SPAs) and potential SPAs (pSPAs) and Ramsar Sites. These sites are collectively termed Natura 2000 sites.

**Health Impact Assessment (HIA):** A practical approach used to assess the impact of plans and policies on health and wellbeing. This process helps to make informed decisions with the aim to minimise any possible negative implications.

**Heritage Asset:** A building, monument, site, place, area or landscape that is identified as having a degree of significance meriting consideration when making planning decisions. This includes designated assets and those identified by the local planning authorities.

**Historic Environment:** All aspects of the environment that have resulted from the interaction between people and places throughout time. This includes surviving physical remains of past human activity.

**Hydraulic Fracturing:** Also known as fracking, a process used to extract oil and gas found in rock deep underground. This involves the fracture of rocks to release the oil and gas, a mix of sand, water and chemicals is pumped under high pressure into bore holes to create this fracturing.

**Industrial Minerals:** Minerals that are essential in supporting industrial and manufacturing processes such as industrial limestone, brick clay and vein minerals.

**Infrastructure:** collective term for services that are necessary for communities to function such as roads, water and electricity. In terms of mineral working sites infrastructure relates to the plant necessary to work the mineral before it leaves the site.

**Landbank:** A stock of land with planning permission to work minerals. Can be used as a monitoring tool to assess the amount of unexploited aggregate mineral reserves and assess the amount of time supply will last based on the forecasted level of demand.

**Local Aggregates Assessment (LAA):** Produced annually and used to plan for a steady and adequate supply of aggregates. It assesses all supply options and forecasts future demand of aggregates. The LLA is prepared jointly between Derbyshire County Council, Derby City Council and the Peak District National Park Authority.

**Material Consideration:** A matter that should be taken into account in deciding a planning application or on an appeal against a planning decision.

**Mineral Consultation Area (MCA):** Geographical area based on a Mineral Safeguarding Area, where the district or borough council should consult the Mineral Planning Authority for any proposals for non-mineral development.

**Mineral Development:** The term ‘mineral development’ includes the exploration and extraction of minerals both above and below ground, the processing and transportation of minerals and the restoration of mineral sites. It includes the location, design and operational practices of development associated with new and existing mineral sites.

**Mineral Related Development:** Refers to the infrastructure, plant and vehicles used to extract, process and transport minerals and restore mineral sites.

**Mineral Resources of Local and National Importance:** Minerals which are necessary to meet society’s needs, including aggregates, brick clay (especially Etruria Marl and fireclay), silica sand (including high grade silica sands), coal derived fly ash in single use deposits, cement raw materials, gypsum, salt, fluorspar, shallow and deep-mined coal, oil and gas (including conventional and unconventional hydrocarbons), tungsten, kaolin, ball clay, potash, polyhalite and local minerals of importance to heritage assets and local distinctiveness.

**Mineral Safeguarding Area (MSA):** Areas defined by mineral planning authorities to protect potentially workable resources of minerals from sterilisation by other forms of development which may prevent future extraction of the mineral.

**Mitigation:** Actions taken to reduce the impact of future adverse effects.

**Monitoring Report:** Produced annually to check progress of policy implementation and review their outcomes to assess effectiveness and impact of the Plan.

**National Park:** The statutory purposes of national parks are to conserve and enhance their natural beauty, wildlife and cultural heritage and to promote opportunities for public understanding and enjoyment of their special qualities. National parks are designated by Natural England, subject to confirmation by the Secretary of State under the National Parks and Access to the Countryside Act 1949.

**National Planning Policy Framework (NPPF):** Sets out the Government’s planning policies for England and how these should be applied and provides a framework within which locally prepared plans can be produced.

**Natural Flood Management:** Managing flood and coastal erosion risk by protecting, restoring and emulating the natural ‘regulating’ function of catchments, rivers, floodplains and coasts.

**Non-operational Mineral Site:** A mineral site wherein the winning and working or depositing of minerals is not currently taking place.

**Operational Mineral Site:** A mineral site wherein the winning and working or depositing of minerals is currently/intermittently taking place.

**Overburden:** soil and other materials that lie above the mineral reserve, can be stored for later use in restoration of worked land.

**Permitted Mineral Reserves:** Mineral deposits that have planning permission for extraction.

**Preferred Area:** areas of known mineral resources where planning permission might reasonably be anticipated. Such areas may also include essential operations associated with mineral extraction.

**Ramsar Site:** Wetland sites considered to be of international importance. Sites are declared under the 1971 Ramsar Convention, which was established by UNESCO.

**Reclamation:** The act of restoring land used for the winning and working of minerals to an acceptable environmental condition for either resumption of former land use or for a new use, examples include agriculture, forestry or conservation.

**Recycled Aggregates:** Aggregates produced from recycled construction waste such as crushed concrete or asphalt pavement.

**Regional Aggregates Working Party:** A working group consisting of local authority officers, representatives of the aggregates industry and central government established to consider the supply and demand for aggregate minerals.

**Safeguarding:** Protection of a particular mineral site or resource from intruding non-mineral development.

**Secondary Aggregates:** Aggregates that are by products from industrial processes, including the production of primary aggregates. They have not been previously used for construction such as, incinerator bottom ash, railway ballast and fine ceramic waste.

**Special Area of Conservation (SAC):** Areas defined by regulation 3 of the Conservation of Habitats and Species regulations 2017 which have been given special protection as important conservation sites. They are designated to give protection to one or more specific habitats and/or species and is part of a global effort to conserve the worlds biodiversity.

**Special Protection Area (SPA):** Areas classified under section 15 of the Conservation of Habitats and Species Regulations 2017, identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds. These areas are classified under the Birds Directive and are found within European Union countries.

**Specific Site:** Where viable mineral resources are known to exist, landowners are supportive of minerals development and the proposal is likely to be acceptable in planning terms. Such sites may also include essential operations associated with mineral extraction.

**Statement of Common Ground (SOCG):** The National Planning Policy Framework (NPPF), requires strategic policy-making authorities to prepare and maintain statements of common ground (SOCG), documenting the cross-boundary matters being addressed and the progress in co-operating to address these.

**Statement of Community Involvement (SCI):** Required to be prepared under the provisions of the Planning and Compulsory Purchase Act 2004, a document which sets out planned involvement of the local community and other interested stakeholders in the planning process and development management decisions.

**Sterilisation:** A change of use to land or non- mineral related development such as housing and roads that restrict the access to mineral deposits causing sterilisation as extraction of these minerals becomes impossible for the foreseeable future.

**Strategic Flood Risk Assessment (SFRA):** Risk assessment carried out by local authorities to evaluate potential flood risk. Investigation considers current and future risk as well as land use change, levels of development and climate change.

**Strategic Transport Assessment (STA):** Provides evidence to support policies and proposals by assessing the impact of the planned policies on the transport network.

**Sustainability Appraisal (SA):** A way of promoting sustainable development through plan and policy implementations this appraisal should be undertaken throughout the development of a policy document and involves testing the impact of the plan against a series of sustainability objectives. This appraisal determines the degree in which plans, and policies contribute to the achievement of sustainable development.

**Sustainable Development:** Broadly refers to development that meets the needs of the current generation without comprising the ability of future generations to meet their own needs.

**Traffic Impact Assessment (TIA):** An assessment of the effects upon the surrounding area by traffic as a result of a development, such as increased traffic flows that may require highway improvements.

**Tranquil Areas:** Areas sufficiently remote from the visual or audible intrusion of development or traffic to be considered unspoilt by urban influences.

**Tree Preservation Order (TPO):** A mechanism for securing the preservation of single or groups of trees of acknowledged amenity value. A tree subject to a tree preservation order may not normally be topped, lopped or felled without the consent of the local planning authority.

**Winning:** The preparation of land to make a mineral deposit accessible for extraction.

**Working:** The removal of mineral from deposit below ground.

**World Heritage Site:** A cultural or natural site of outstanding universal value designated by the International Council on Monuments and Sites (ICOMOS).