10 DEVELOPMENT MANAGEMENT

Section 10 | Development Management

Defining minerals development

245. Minerals development consists of a range of processes and activities that vary depending upon the mineral resources being worked and the type of products being supplied. However, commonly it is used to describe the working of minerals, which involves up to four phases –

- Exploration to prove the existence, extent and economic viability;
- Preparation of land to make minerals accessible;
- The removal of minerals from the ground and processing to support the creation of a saleable product; and
- The restoration of the sites once the working of minerals has ended and the maintenance of the site known as aftercare, for a period of time afterwards.

246. In addition, the installation and operation of ancillary buildings and 'added value' plant for the purpose of manufacturing saleable mineral products and other supportive infrastructure (e.g. haul roads, on-site renewable energy generation etc…), which are demonstrably linked to the functions of mineral working fall under the same development type.

247. All other development activities subject to the planning system are not considered to be minerals development and therefore not subject to determination by the Minerals Planning Authority (MPA). In Gloucestershire, the City, Borough and District Councils in their capacity as Local Planning Authorities (LPAs) or the County Council in its capacity as the Waste Planning Authority (WPA) may be an appropriate, alternative local decision maker.

248. Policies contained in the Minerals Local Plan for Gloucestershire would only be relevant with non-minerals development in specific circumstances. This may include where a risk of mineral sterilisation or hindrance to mineral operations is present (see policy MS01); or through the requirement to safeguard mineral infrastructure (see policy MS03).

Permitted development rights

249. The Town & Country Planning (General Permitted Development) Order (GPDO) 2015 sets out a number of 'permitted development rights' that enable certain operations and

activities to take place without the need for planning permission[118]. For mineral developments, this covers the installation, expansion, alteration and repair of plant and machinery and other structures of a certain size and scale; tipping of mineral site wastes; and short-term, time-restricted drilling of boreholes, seismic surveying and related excavations.

250. During the determination of mineral development proposals, decision makers may consider it necessary for permitted development rights for future activities to be removed. This is achieved through the use of planning conditions. It is normally considered where uncontrolled permitted development could risk unbalancing carefully assessed impacts and / or prejudice the effectiveness of approved mitigation measures.

251. The GPDO 2015 also allows MPAs to remove permitted development rights outside of the consideration of a planning application. This is known as an Article 4 Direction. In parts of Gloucestershire, where uncontrolled permitted development could risk causing harm to sensitive locations such as the Cotswolds, Wye Valley and Malvern Hills AONB designations or Sites of Special Scientific Interest (SSSIs), the use of Article 4 Directions may be appropriate. The introduction of Article 4 Directions over the time horizon of the plan will be kept under review by the MPA. Particular attention in this instance will be given to the changing nature over time of minerals development within and / or close to sensitive locations.

Preparing applications for mineral development

252. Before any decision is taken to submit a planning application for minerals development, prospective applicants will need to review the Gloucestershire County Council's Local Validation Checklist[119]. This sets out the range of information needed in order to effectively assess planning proposals. The checklist includes both compulsory 'national' standard requirements applicable to all applications and 'local' requirements that relate to particular circumstances covered by relevant local development plan policies that are in force across the county.

253. A vital part of the decision making process is the consideration of possible impacts arising from minerals development. As a result, applicants should complete necessary impact assessments, provide an analysis of their findings, and then report upon potential means of avoiding impacts or deliverable mitigation measures. All relevant

[118] Part 17 of the Town & Country Planning (General Permitted Development) Order 2015 covers matters relating to mining and mineral exploration. The entire order can be viewed on-line at: - http://www.legislation.gov.uk/uksi/2015/596/pdfs/uksi_20150596_en.pdf.
[119] The most recent version of the Gloucestershire County Council Local Validation Checklist can be obtained online at: - http://www.gloucestershire.gov.uk/planning-and-environment/planning-applications/make-a-planning-application/

information should be provided alongside the submission of a planning application. Failure to do so may dramatically increase the risk of a proposal being refused planning permission.

254. To support prospective applicants, Gloucestershire County Council operates a Pre-application Planning Advice Service[120]. This seeks to offer advice on a range of matters such as the different types of document that may be needed to support any subsequent planning application; the scale and nature of any technical advice that might be needed from specialists; and to outline potential planning matters and issues that could arise with an emerging proposal. The advice provided arises from council officers and is given in good faith and to the best of ability and experience, without prejudice to the formal consideration by the MPA of any future planning application. The service operates under a standard charging regime, which is kept under review and revised from time to time[121].

255. Where significant effects upon a local area are anticipated, it is expected that prospective applicants will carry out early engagement with local communities prior to submitting a planning application. This approach is supported by the Gloucestershire Statement of Community Involvement (Glos-SCI), which offers specific advice on how to undertake pre-application engagement. It also sets out how the findings of these exercises will be taken into account should a planning application be forthcoming[122].

Environmental Impact Assessment (EIA) requirements

256. Planning applications must be screened as part of the Environmental Impact Assessment (EIA) process to determine whether or not they require an Environmental Statement. This is required by UK law. The screening and subsequent scoping processes help to identify whether a proposal is likely to have significant environmental effects, and if so, an Environmental Statement (ES) must accompany any submitted planning application[123].

257. Proposals falling within Schedule 1 of the EIA Regulations must be accompanied by an ES. Proposals under Schedule 2 may require an ES depending on individual circumstances usually relating to the type, scale and location of the development. An

[120] Details of the Gloucestershire County Council Pre-application Planning Advice Service can be obtained online at:- http://www.gloucestershire.gov.uk/planning-and-environment/planning-applications/make-a-plasnning-application/

[121] Fees for advice sought through Gloucestershire County Council Pre-application Advice Service came into force on 1st January 2016. They are reviewable via relevant GCC guidance that can currently be obtained at: - http://www.gloucestershire.gov.uk/planning-and-environment/planning-applications/make-a-planning-application/

[122] The 1st Review Gloucestershire Statement of Community Involvement (SCI) (Adopted 2013) can be obtained online at: - http://www.gloucestershire.gov.uk/planning-and-environment/planning-policy/statement-of-community-involvement-sci/

[123] Planning Practice Guidance (PPG) Environmental Impact Assessment section, paragraphs 01 to 058 explain the requirements as set out in Town & Country Planning (Environmental Impact Assessment) Regulations 2017.

ES should identify the likelihood of significant impacts occurring. It should also show how these impacts can be avoided, mitigated and compensated for, and consider alternative ways the development might be carried out. It should be noted that mineral working can often fall under Schedule 2 and sometimes Schedule 1 for larger scale development.

Development management – considering applications for minerals development

258. A key function of the MPA is to determine planning applications for future minerals development. This function is known as Development Management.

259. Mineral developments within the county requiring planning permission must be determined in accordance with the policies contained within the adopted Minerals Local Plan for Gloucestershire unless material considerations indicate otherwise. This is a core convention of the English planning system enshrined in planning law[124].

260. Consequently, the effective delivery of development management will be fundamental to realising the ambitions of the plan, particularly in ensuring new proposals are contributing to the achievement of sustainable development – national government's ambition for planning[125]. The objectives that sit behind the Minerals Local Plan for Gloucestershire, which themselves are a local interpretation of measures to deliver sustainable development should be afforded attention. To ensure this occurs all development management policies contain links to the requisite objectives of the plan.

261. The consideration of the plan's development management policies must be undertaken in conjunction with a review of other relevant thematic mineral polices contained elsewhere in the plan (see sections 6,7,8,9 and 11). This is to ensure proper account has been given to all local policy matters affecting a particular proposal.

262. The remainder of this section provides a full and comprehensive suite of development management policies relevant to future mineral development proposals within Gloucestershire. It incorporates full policy details and local guidance to assist prospective applicants in their initial appraisal, preparation, design and subsequent submission of planning applications. The supporting text for each policy covers both a reasoned justification for its inclusion in the plan and important information relating to implementation and interpretation.

[124] Established under Section 38(6) of the Planning and Compulsory Purchase Act 2004 and Section (70(2) of the Town and Country Planning Act 1990
[125] National Planning Policy Framework (NPPF) 2012, paragraphs 6-10 set out the terms under which the delivery of the planning system can demonstrably achieve sustainable development. The focus is on ensuring the integrated delivery of its three dimensions – economic, social and environment through three consequential roles to be performed by the planning system.

263. The order in which the policies have been presented is designed to aid those using the plan. It is reflective of how often the matters contained within the policies have been assessed within planning application for minerals developments over the recent past. The ordering of policies is not representative of their relative importance within the plan.

Amenity

Reasoned justification

264. Minerals can only be worked where they occur. This means those living and working nearby to mineral development sites and others who access recreational and leisure facilities and / or enjoy ecosystem services in the same locality could be subject to amenity impacts.

265. Amenity impacts can be numerous and differ in frequency, significance and complexity on a case-by-case basis related to the types of activities taking place and the relationship to nearby land uses. Nevertheless, for mineral developments there are usual risks that arise such as: - noise; air pollution from fumes and / or dust; vibration; and visual intrusion, which can incorporate light pollution and loss of privacy. The way in which minerals are worked, how they are stored and transported in, out and around a site, whether ancillary processing takes place to create saleable products; and the phase of development (e.g. site preparation, working of minerals, implementing restoration etc.) are likely to be influential factors.

266. It is important that a balance is struck between enabling the need for minerals to be met through their working, processing and transportation and ensuring that those who might be affected are afforded protection. The extent to which a good standard of amenity is achievable for all users and occupants of land and buildings now and in the future is a measure of success in this regard and is a core land-use planning principle set out in national policy[126].

Policy DM01 | Amenity

Mineral development proposals will be permitted only where it can be demonstrated adverse impacts on the amenity of local communities within Gloucestershire and those of neighbouring administrative areas will be avoided, strictly controlled or mitigated so as to ensure unacceptable impacts will not arise in respect of noise, vibration, air pollution and visual intrusion.

Contributes to the delivery of plan objective 

[126] National Planning Policy Framework (NPPF) 2012, paragraph 17, bullet point 4

Interpretation and implementation

267. The term 'local communities' as applied to policy DM01 includes all local residents, workers and visitors of a particular area. A local community could have a small membership and display similar characteristics and values, which is often the case with hamlets or small villages. Alternatively, it could include a large and diverse number of parties with complex relationships that also exhibit varying interests. Local residents; business owners, employees and their customers; visitors and / or other users of the area could all be part a single community, brought together by their association to a location and potential sensitivity to minerals development.

268. Policy DM01 applies a broad understanding of 'amenity'. It deals with all items that could contribute towards people's quality of life, which is an influential factor in health and well-being. Accessibility to services is a key feature of amenity from a land-use planning perspective. It may include the sustained functioning of the local natural and built environment, accessibility to green infrastructure; and the ability to nurture a vibrant, growing and stable economy capable of supporting the financial needs and future wealth ambitions of local communities.

269. Mineral development proposals must be accompanied by thorough investigations concerning amenity impacts. These investigations must be clear in their presentation of outcomes and be able to be scrutinised. They must highlight the potential for adverse amenity impacts to occur and their possible significance. Furthermore, details of any proposed mitigation measures and what commitments and resources will be afforded to them to ensure implementation and routine monitoring must be provided. This could include the delineation on a case-by-case basis of amenity buffer zones between minerals development and sensitive receptors. All monitoring programmes will be carefully scrutinised before any development is allowed to take place.

The use of Health Impact Assessments (HIAs)

270. Health Impact Assessments (HIAs) provide information to help decision-makers consider how a proposal might impact, directly or indirectly, on people's health and wellbeing. Mineral development proposals may benefit from the carrying out of a HIA, as health and wellbeing are potentially important matters that need to be considered in the determination of planning proposals[127]. A proportionate approach to determining whether a HIA is required will be taken based on the scale and significance of mineral development proposals having regard to the health and wellbeing of local communities. Major mineral schemes that must be accompanied by an Environmental Statement will represent the threshold for considering the need to prepare a HIA.

[127] Planning Practice Guidance (PPG), Health and wellbeing section, paragraph: 001, reference ID: 53-001-20140306.)

However, major mineral development proposals that are within close proximity to potentially sensitive uses such as schools, child care centres, hospitals, adult and older persons' facilities and leisure and recreational centres will likely require a HIA. Advice from the Director of Public Health should be sought at the earliest possible opportunity and ideally at the early pre-application stage, to establish whether preparing a HIA would represent the most efficient and effective way of presenting supporting evidence on health matters and for determining the scope and level of detail necessary. A HIA can be undertaken as a stand-alone assessment or integrated into a wider Environmental Statement, although in all instances it should be closely aligned with other technical investigations such as those covering environmental and transport impacts.

271. Where a HIA is completed it should present sufficient evidence to determine whether potential significant health-related effects (positive and / or negative) will arise from on-site mineral working and other associated activities such as restoration, the transportation of minerals and any importation, and where relevant, facilitated after-uses following restoration. HIA information may contribute to the reasoned justification(s) for why certain actions, such as mitigation measures will be necessary or not required. An important feature of a HIA is that it offers a way of ensuring the health and wellbeing of all sections of an affected community will be afforded sufficient scrutiny, including those that already experiencing disadvantage and / or present vulnerable health characteristics.

Ongoing community consultation / liaison

272. Mineral development proposals likely to have a lasting and / or significant impact upon a local community should include details of whether there is local appetite for setting up a community consultation group to discuss ongoing amenity matters. These groups can present opportunities to achieve workable, agreeable solutions where disputes arise or concerns remain at the commencement stage and during the lifetime of a development. It will be expected that the operator of a minerals development will be the lead co-ordinator and will ensure all reasonable steps have been taken to instigate and sustain a community consultation group. Representations will need to be sought from a number of key parties including the local community and its various interests, the County Council and other regulators. The establishment of a community consultation / liaison group secured either by way of planning condition or a planning obligation could have material weight in the decision making process.

273. Detailed matters have been provided below under a suite of discrete headings covering the different types of amenity impact commonly experienced with minerals development proposals in Gloucestershire that are applicable to policy DM01:-

Noise

274. Throughout the life of a mineral development, different activities may generate noise impacts[128]. These may include the initial preparing of the land for mineral working, the working of the minerals itself, moving materials around the site, mineral processing, and off-site transportation. The usual siting of minerals development in quieter, rural areas also means there is a heightened risk that tranquillity and the enjoyment of the countryside could be diminished.

275. Mineral development proposals should, in line with planning practice guidance, undertake a noise impact assessment that identifies all sources of noise[129]. For each noise emission identified, the assessment should take into account the characteristics, the proposed operating locations, procedures, schedules and the duration of the work for the life of the mineral operation, and the likely impacts on the surrounding locality. The impact of each noise emission should be considered against the existing acoustic environment and its noise sensitivity. Suitable control, the use of mitigation measures and the monitoring of noise levels will need to be identified. Noise levels may be controllable through the careful siting of plant, maintenance areas and haul roads in relation to nearby properties. Baffle mounds may also be an acceptable mitigation solution and suitable vehicle reversing alarms should be installed. Planning conditions will be sought to secure the effective implementation of mitigation measures and monitoring of noise levels.

276. In line with national policy, noise levels should be kept to a minimum practicable level consistent with good environmental standards that will not give rise to significant adverse impacts on the health of communities and their quality of life[130]. It is acknowledged that the acceptability of noise levels will be related to the working methods at a particular site and that different levels will be acceptable at different times of the day. The sensitivity of the features that may be affected will be a contributing factor. The need to establish noise limits at noise sensitive locations is a standard approach under national policy that will need to be employed[131]. Early engagement with Environmental Health Officers from the relevant District Council regarding this matter should be undertaken as the ability to deliver effective monitoring may prove to be a pivotal issue in the decision making process.

277. As recognised in national policy some noisy short-term activities, such as soil-stripping and road construction may be unavoidable in order to facilitate mineral extraction[132].

[128] National Planning Policy Framework (NPPF) 2012, paragraph 123, bullet point 3
[129] Planning Practice Guidance (PPG) mineral section, paragraph: 019, reference ID: 27-019-20140306
[130] National Planning Policy Framework (NPPF) 2012, paragraph 123, bullet point 1
[131] National Planning Policy Framework (NPPF) 2012, paragraph 144, bullet point 4
[132] National Planning Policy Framework (NPPF) 2012, paragraph 143, bullet point 6

However, wherever possible, these activities should only take place between suitable hours and during very limited periods within the year.

Air pollution – fumes, odour and dust

278. Mineral developments can impact upon local air quality affecting both local communities and the quality and supply of ecosystem services. This may occur through the release of particulates from emissions and dust, and in some instances, through unpleasant odours. Air pollution can arise from on-site mineral working activities, but may also be caused by vehicles using unsurfaced roads, from wind blowing across stockpiles and quarry waste storage, and the exposure of unconsolidated, bare ground. An air quality impact assessment may be necessary to accompany a mineral development proposal and the requirement for such an assessment, will be decided on a case-by-case basis having considered the nature and scale of development and the level of concern about air quality[133]. Where assessments are required, they must take into account existing air quality levels prior to development and establish whether any new sources of air pollution are likely to arise and what their influence on existing air quality could be. The impact on air quality from changes to local traffic linked to minerals development both near to the site and / or further afield along defined freight routes will need to be included. Account should also be given to the scale, duration, hours of operation, type of activities being proposed; whether they are likely to be temporary or continuous and the existence of other operations in the same locality.

279. In the consideration of any potential dust-related emissions, commitments to meet appropriate mitigation standards will be required and any resulting actions must be taken throughout the lifespan of operations. Technical advice on how dust emissions should be handled is provided within planning practice guidance[134].

280. Air quality across Gloucestershire is largely considered to be within acceptable levels, although some localised air quality issues exist principally linked to vehicle emissions. Exceeding acceptable levels of nitrogen dioxide and air particles has led to Air Quality Management Areas (AQMAs) being declared at sites across the county[135]. The effect on local AQMAs by minerals development, including from associated vehicular movements could prove to be a significant air quality impact issue. This will need

[133] Planning Practice Guidance (PPG) air quality section, paragraph: 007, reference ID: 32-007-20140306
[134] Planning Practice Guidance (PPG) assessing environmental impacts from mineral extraction section, paragraph: 023, reference ID: 27-019-20140306
[135] DEFRA publishes data on declared Air Quality Monitoring Areas (AQMAs) across the country, including across Gloucestershire - http://uk-air.defra.gov.uk/aqma/

careful consideration within air quality impact assessments. An approach supported by planning practice guidance[136].

281. Mineral developments must not compromise efforts to positively contribute towards the achievement of national air quality objectives and targets concerning the protection of human health[137].

Vibration

282. Vibration linked to blasting operations is largely a concern of Gloucestershire's hard rock mineral sites, where crushed rock aggregate is produced. The effects associated with blasting can include ground vibration, air overpressure and projected rock particles. The scale of impacts is dependent on the type and quantity of explosives, degree of confinement, the distance to the nearby development, underlying geology and surrounding topography and atmospheric conditions.

283. Where the risk of vibration impacts is present, avoidance of these impacts should be seen as the preferred solution. Under circumstances where blasting might be required, avoidance could be achieved by using alternative working techniques[138]. However, if it is practicably unavoidable to carry out blasts, all operations must be carefully designed so that the number of events and the quantity of explosives is kept to a minimum. Specific limits controls and ongoing monitoring may be necessary. This will be enforced through the use of planning conditions to ensure the protection of surrounding areas, particularly nearby land uses sensitive to vibration.

284. Adverse impacts associated with ground vibration may also be generated by the movement of minerals to and from mineral workings. In Gloucestershire, this is most likely to be a concern with the use of heavy goods vehicles on local roads for means of access and / or local delivery. In the event there is a risk of unacceptable adverse impacts occurring with mineral development proposals, careful consideration must be given to the size, scale and frequency of vehicle movements that cause ground vibration and whether it is reasonable and justified to impose operational restrictions through the use of planning conditions.

[136] Planning Practice Guidance (PPG) air quality section, paragraph: 002 Reference ID: 32-002-20140306

[137] Details covering the UK's Air Quality Limits are reviewable via the DEFRA website at:- http://uk-air.defra.gov.uk/air-pollution/uk-eu-limits

[138] 'Ripping' is an established alternative to blasting. It is a means of achieving the mechanical breakage of rock. A common method includes the use of a bulldozer fitted with a tooth at the rear. Where secondary fragmentation is deemed necessary, alternatives to blasting could involve the use of a steel drop ball or pneumatic / hydraulic impact breakers. Minerals development proposals may be required to demonstrate why these types of alternative options are not possible as part of their justification for the need to carry out blasting.

Visual intrusion – visual impacts, light pollution and privacy

Visual impact

285. The scale and significance of visual impacts is normally defined through an assessment of publicly accessible viewpoints. Of critical importance is the identification of nearby receptors (e.g. residential properties, places of work, visitor attractions etc.) and the degree of adversity that might present itself. Visual impact will be reviewed against relevant components of a mineral development such as the evolving nature of the site landform; the approach to screening, including management of any retained features; site layout; access arrangements; height and design of any built structures and machinery; and the planned programme of restoration. The likely effectiveness of any proposed mitigation will be of the upmost significance. Mineral development proposals should be accompanied by an appropriately detailed visual impact assessment concerning the relevant matters identified above. This should ideally form part of an integrated assessment including wider landscape impacts that is often described as a Landscape & Visual Impact Assessment (LVIA)[139].

Light pollution

286. Mineral developments can generate light pollution where operations take place in the morning at or around sunrise, into the late afternoon and evening and in certain circumstances at night. Light pollution may involve skyglow (upward light pollution), lateral glare or light spill (where lighting illuminates areas beyond where it is supposed to).

287. Unacceptable levels of light pollution can adversely affect the quality of life and well-being of local communities and the enjoyment of the natural environment including intrinsically dark landscapes. There may also be potential impacts to biodiversity such as feeding bats. As a result light impacts from artificial lighting must be well designed and effectively controlled so as not to breach acceptable levels. Attention should be given to the positioning, height, alignment, intensity and proposed periods of use. Planning practice guidance considers the effective assessment of light pollution and relevant factors for review through the planning system[140].

288. The Cotswolds AONB contains several designated Dark Sky Discovery Sites that are located within Oxfordshire, but very close to the county boundary[141]. Any nearby

[139] Planning Practice Guidance (PPG) minerals extraction section, paragraph: 059, reference ID: 27-059-20140306

[140] Planning Practice Guidance (PPG) light pollution section, paragraph: 001, reference ID: 31-001-20140306

[141] East of Moreton-in-Marsh at Long Compton and the Rollright Stones site close to Chipping Norton have been designated as Dark Sky Discovery Sites. More information on these sites can be obtained at: - http://www.darkskydiscovery.org.uk/dark-sky-discovery-sites/map.html#nominate

minerals development proposals that risk generating light pollution should take account of the special characteristics of these designations.

Privacy

289. The siting of mineral developments in relation to neighbouring properties could result in the loss of privacy, usually through overlooking. Loss of privacy will normally be measured against the amount of private space afforded to residential properties likely to be adversely affected. The disruption caused to the enjoyment of habitable rooms within the main dwelling house and any immediate garden space will represent the starting point for defining private space that may be impacted[142]. Nevertheless, assessments of this nature must be carried out on a case-by-case basis. The entire curtilage of a dwelling house may not always be a reasonable and proportionate definition of private space for determining whether a loss of privacy will occur.

[142] A habitable room is normally defined as being a bedroom; living room; kitchen; dining room; study / home office; and / or a child's play-space. It is not usual to apply the same definition to a hallway; stairwell; passageway; or utility room.

Cumulative Impact

Reasoned justification

290. The cumulative effect from mineral developments can give rise to challenging adverse impacts, which may prove to be unacceptable. Cumulative adverse impacts can result from multiple activities taking place on a single site and / or as a result of a combination of activities across several mineral development sites. It may also arise from intensified development generally across a locality, which can extend beyond the administrative area of Gloucestershire.

Policy DM02 | Cumulative impact

Mineral development proposals will only be permitted where it can be demonstrated: -

I. unacceptable cumulative adverse impacts will not be generated from within the mineral site for which the proposal is located and / or from a number of minerals and non-mineral developments in the locality; or

II. the benefits of development will clearly outweigh unacceptable cumulative adverse impacts to justify the grant of planning permission.

Contributes to the delivery of plan objectives 

Interpretation and implementation

291. National policy identifies the potential for harm from the cumulative effects of minerals development. It is expected that all potential cumulative effects are appropriately assessed to ensure any unacceptable adverse impacts on natural and historic environments and human health will not transpire[143]. It also states that new development must not create severe cumulative adverse impacts on the transport network[144].

292. Mineral development proposals will be expected to identify potential cumulative impacts and to show how these will be avoided or sufficiently mitigated to prevent unacceptable adverse impacts from arising. In respect of cumulative impacts related

[143] National Planning Policy Framework (NPPF) 2012, section 13, paragraph 143, bullet point 6.
[144] National Planning Policy Framework (NPPF) 2012, section 4, paragraph 32, bullet point 3.

to intensified development across a locality, the parameters for this will need to be agreed on a case-by-case basis depending upon prevailing environmental conditions and geography, the scale of development proposed in relation to permitted activities and the nature of the individual matter of amenity and / or environmental concern subject to a cumulative impact assessment. Nevertheless, in all instances advice should be sought from the MPA at the earliest possible opportunity and ideally at the early pre-application stage, to establish how cumulative impact matters should be addressed.

293. It may be justified to impose planning conditions to limit activities by way of operating hours or levels of production on a monthly or annual basis in order to make proposals acceptable in planning terms. Other specific policy requirements contained within the plan may also have a role in avoiding or minimising cumulative impacts. An example of this is policy MR01 (Restoration, aftercare and facilitating beneficial after-uses), where phased working and progressive restoration techniques are the preferred approach. Under these circumstances the principle that underpins policy DM02 should be adhered to.

294. Where it is not possible to demonstrate that cumulative adverse impacts can be effectively mitigated to an acceptable level, consideration could be given to the possible benefits from mineral development proposals whether these may outweigh anticipated harm. An assessment of identified benefits will be required and this will be rigorously scrutinised. Benefits may amount to wider environmental improvements, a meaningful contribution towards sustaining or growing the local economy, or avoiding the unnecessary sterilisation of valuable mineral resources. However, the nature and significance of any benefits put forward will only be judged on a case-by-case basis.

Transport

Reasoned justification

295. Mineral developments are heavily reliant on Gloucestershire's highway networks and those of surrounding areas. They allow for the hauling of minerals to markets or for further processing and provide the means by which staff and customers can gain access. The county's mineral supplies are predominately local in nature and follow well established routes that are strongly aligned with the existing road infrastructure. This presents very limited opportunities for more sustainable modes of non-road transport such as rail, ports or other inland waterways to attract the necessary interest and accompanying investment to act as a viable alternative. Nevertheless, Gloucestershire still contains numerous rail links, navigable waterways and canals that under the right circumstances could be used as an alternative to the movement of minerals by road.

296. As far as possible it is vitally important that Gloucestershire's roads function in an efficient and effective manner. The management of all traffic generated locally and further afield is vitally important to this fundamental aim. For new mineral development proposals, the generation of new or additional vehicle movements must not result in unacceptable adverse impacts on the county's highway networks and also those of surrounding areas.

297. Avoiding the creation or exacerbation of transport impacts through new development will always be the preferred approach and wherever possible efforts should be made to minimise the amount of road miles travelled. Not only will this reduce the potential for adverse impacts to occur, but it will also contribute towards wider national transport policy ambitions – such as reducing the need for travel by significant road users[145] and helping to curb greenhouse gas emissions from freight[146].

298. In addition, significant technological advancements across the transport sector are anticipated over the coming years, which will also make a valuable contribution towards tackling climate change. These are likely to include major improvements in fuel efficiency, the introduction of low and ultra-low emission haulage vehicles, and in time, zero emission vehicles that employ only non-fossil fuel based means of power[147].

[145] National Planning Policy Framework (NPPF) 2012, section 4, paragraph 34
[146] Government Freight Policy – https://www.gov.uk/government/policies/freight
[147] BEIS (2017) Clean Growth Strategy: An ambitious blueprint for Britain's low carbon future https://www.gov.uk/government/publications/clean-growth-strategy

299. Mineral developments can also affect other transport-related infrastructure such as the public rights of network and open access land[148]. Wherever reasonable and practicable, these facilities should be retained and their safe use, function and enjoyment preserved.

Policy DM03 | Transport

Part a | Sustainable transport

Mineral development proposals that minimise the miles travelled by minerals and demonstrate how road-based transport will also be kept to a minimum will be permitted. Wherever possible alternative and more sustainable, modes of non-road transport must be used along with fuel efficient and / or low, ultra-low or zero greenhouse gas emitting haulage vehicles.

Part b | Highway Network

Mineral development proposals will only be permitted where public safety is not adversely affected and it can be demonstrated: -

I. unacceptable impacts on the capacity and function of the strategic and local highway networks will be avoided or satisfactorily mitigated; and

II. any unavoidable adverse impacts on the capacity and function of the strategic and local highway networks will not be severe.

Part c | Public Rights of Way (ProW) Network and open access land

Mineral development proposals will only be permitted where it can be demonstrated: -

I. public rights of way routes and / or open access land will be retained and their safe use maintained, and unacceptable adverse impacts will be avoided or satisfactorily mitigated; and / or

II. the temporary or permanent diversion of public rights of way routes

[148] Open access land is provided for through the Countryside and Rights of Way (CROW) Act 2000. It allows the right of access by foot for open air recreation. However, it is subject to a number of exclusions set out in the legislation. In Gloucestershire, a significant amount of the Public Forest Estate within the Forest of Dean has been designated as open access land without exclusions or restrictions.

and / or the temporary restriction or permanent exclusion of access to open access land is justified and that such changes will not affect public safety and cause unacceptable impacts on the integrity and enjoyment of the wider public rights of way network and / or open access land in the locality; and / or

III. the formal closure of public right of way routes represents a very exceptional circumstance where replacement routes are no longer required and that unacceptable impacts on the wider public rights of way network will be avoided.

Mineral development proposals affecting National Trails will be permitted only where unacceptable adverse impacts are avoided or satisfactory mitigated.

Contributes to the delivery of plan objectives 

Interpretation and implementation

Transport Network

300. Avoiding adverse impacts on Gloucestershire's local and strategic highway networks and those of surrounding areas is the preferred solution with new mineral developments. Minimising the amount of vehicular movements linked to a proposal site could be a means of accomplishing this, which is also supported by national policy[149]. Ideally using existing transport infrastructure that supports non-road modes of transport such as rail and inland waterways within and beyond the county, and port facilities for more strategic journeys, should occur wherever possible. However, where additional infrastructure is needed to enable the use of non-road modes of transport, this will also need to be acceptable in planning terms.

301. Non-road haulage of minerals is limited within the county due to the reasons discussed both in the spatial portrait and reasoned justification for the policy. Nevertheless, at the local level preference should still be given to on-site processing rather than exporting raw material to other facilities, using conveyor belts and pipelines, or constructing internal haul roads. Although careful consideration must be given to other planning matters such as avoiding unacceptable amenity impacts.

[149] National Planning Policy Framework (NPPF) 2012, section 4, paragraph 35

302. For new mineral development proposals that use the local and / or strategic highway network, the potential for adverse impacts arising must be carefully scrutinised. National policy provides a clear threshold in this respect, focused on ensuring severe impacts on the highway network is prevented[150]. Particular issues likely to be scrutinised include: - network capacity; safety of road users, debris on the highway and related amenity impacts such as noise, dust, vehicular vibration, and air and water pollution (see also Policy DM01). These impacts may be of significance to a variety of sensitive receptors located along mineral haulage routes and not just those local communities that are close by to the proposal site. For matters relating to potential impacts on the maintenance of the highway, this is dealt with under s.59 of the Highways Act 1980 and the provision available to recover expenses due to extraordinary traffic.

303. Attention should also be given to other related policies set out in the plan such as policies DM01 and DM05 concerned with amenity and water quality impacts respectively. Policy DM02 may also require consideration where cumulative impacts are likely to be present.

304. In addition, opportunities to reduce impacts on the highway networks resulting from staff / and or site visitors should be investigated, particularly where this may contribute to the delivery of other cycling and walking initiatives.

305. Furthermore, the benefits resulting from a transition away from fossil-fuel based road haulage should be taken into account. Increasing significance should be given to the most advanced technology available at the time, moving from increased fuel efficiency to low emission vehicles, then ultra-low emission vehicles, and ultimately zero emission vehicles.

Highways-related requirements with minerals development proposals

306. The Local Highway Authority (LHA) and / or Highways England (HighE)[151] – who are responsible for stretches of the strategic road network (SRN) within Gloucestershire, should be contacted by prospective applicants, where highway networks could be affected. This will help to establish as early as possible whether a Transport Assessment (TA) or Transport Statement (TS) is needed and what will be required as part of any subsequent highway assessment[152].

[150] National Planning Policy Framework (NPPF) 2012, section 4, paragraph 32, bullet point 3

[151] As of April 2015 the Highways Agency (HA) was replaced by Highway England (HighE) under provisions set out in the Infrastructure Act 2015. HighE is described as an 'arm-length government company' with responsibility for the managing the Strategic Highway Network (SRN) covering England, which was previously managed by the HA. https://www.gov.uk/government/news/highways-england-to-take-over-motorways-and-major-a-roads

[152] Planning Practice Guidance (PPG) transport assessments and statements section, paragraph: 013, reference ID: 42-013-20140306 offers advice to LPAs as to the sort of criteria that should apply in determining the need for a TA or TS.

307. In the event potentially unacceptable adverse impacts are identified, information as to how these will be made acceptable will be critical. Mitigation measures to this effect might include specific infrastructure improvements or financial contributions towards work to the highway network. Physical schemes may incorporate junction improvements and management, road widening along stretches of the highway, increasing visibility around site access and / or the construction of new accesses or junctions.

308. Proposals that will affect existing permitted freight movements and / or will generate additional movements on the county's roads and those of surrounding areas, should include commitments that will be enforced by the use of planning conditions or planning obligations, to use freight routes aligned with the Gloucestershire Freight Gateway and other local freight guidance produced for surrounding areas[153].

309. Route management plans that formally designate freight routes for mineral developments may also be sought, particularly where more sensitive sections of the highway could be exposed to minerals-related traffic such as HGVs or ELVs (Extra Long Vehicles). Critical to any new designated route will be the ability to maintain highway safety, and avoid environmental damage and / or loss of amenity for local communities. Sensitive receptors both within and outside of the county should be safeguarded to prevent unacceptable harm from occurring.

310. Local roads considered unsuitable to accommodate the regular movement of freight should be avoided wherever possible. However, the acceptability of using certain local roads for minerals-related traffic to support a proposal will be judged on a case-by-case basis.

PRoW network and open access land

311. In the case of the public rights of way network and open access land, minerals developments should avoid adverse impacts from occurring. Retaining accessibility and usability should be seen as the priority. However, for health & safety and security reasons proportionate restrictions or diversions of a temporary or permanent nature may be necessary.

312. Mineral development proposals affecting the public rights of way network and open access land will need to establish the anticipated scale of any envisaged impacts. All associated details (e.g. diversions) will need to be fully detailed and justified. Local

[153] The Gloucestershire Freight Gateway System can be assessed at: - http://www.gloucestershire.gov.uk/freight-gateway . Other local freight guidance that may be relevant includes: - the Wiltshire (and Swindon) Freight Route Network Map; West of England Freight Network Management Plans (covering Bath & North East Somerset, Bristol City, North Somerset and South Gloucestershire); the freight routing information contained within the emerging Marches Local Enterprise Partnership Freight Strategy, which covers Herefordshire, Shropshire, Telford & Wrekin; Oxfordshire Lorry Route Map; Worcestershire Advisory Lorry Route Map; and Warwickshire Advisory Lorry Route Map (2nd Edition).

advice should be obtained as early as possible from the LHA in respect of this matter. Where opportunities to enhance the network exist, which could involve the creation of additional links, this may be viewed as a relevant factor in determining the acceptability of proposals[154].

313. The presence of National Trails (NTs) should be seen as a potentially significant constraint upon new minerals development. They must not be removed or subject to unacceptable adverse impacts, which could include affects upon their integrity and / or the ability to successfully deliver the management standards set for national trails[155]. Advice from Natural England, Local Highway Authority and the relevant local trail partnership will be sought in respect of this matter.

[154] National Planning Policy Framework (NPPF) 2012, section 8, paragraph 75

[155] There are a number of national standards for National Trails, which cover a range of factors, from path condition to the social and economic benefits of a trail. Details can be found within 'New Deal – The Management of National Trails in England from April 2013' This document can be viewed at: - http://publications.naturalengland.org.uk/publication/6238141?category=211280

Flood risk

Reasoned justification

314. The threat of flooding is present across many parts of Gloucestershire. Significant flooding events in the recent past have highlighted the need to be better prepared and for greater resilience[156]. Over the coming decades the risk of flooding is set to rise. This is due to ever increasing demands upon land from a growing population and the impacts of climate change. Gloucestershire is expected to see greater fluctuations in weather patterns with wetter winters, periods of prolonged drought and more severe, extreme wet weather events at other times of the year[157].

315. Mineral developments have the potential to contribute both positively and negatively to the risk of flooding. While the working of sand and gravel is recognised as being water-compatible, extracting other local mineral resources will require careful consideration of their relationship with areas of heightened flood risk. It is vitally important that the development of mineral sites in all locations does not undermine Gloucestershire's resilience to the effects of flooding now and in the future.

Policy DM04 | Flood risk

Mineral development proposals will be permitted, where it can be demonstrated: -

I. there will be no increase in the risk of flooding on site and elsewhere from all sources of flooding now and in the future;

II. wherever possible, flood risk reduction initiatives will be incorporated that will achieve a reduction in the risk of flooding overall;

III. appropriate measures will be put in place to manage and wherever possible, reduce surface water run-off including through the use of sustainable drainage systems (SuDS);

IV. wherever possible, a net increase in flood water storage capacity will

[156] In 2007 and 2012 Gloucestershire was subject to significant levels of flooding. The 2007 event in particular affected 5,000 residential properties, 500 non-residential premises and left 135,000 people without water for up to 2 weeks.

[157] Extracted from the Gloucestershire County Council Corporate Climate Change Strategy & Action Plan (2008/09 – 2011/12) – *Responding to Climate Change.* This document can be obtained at: - http://www.gloucestershire.gov.uk/planning-and-environment/other-planning-and-environment-matters/environment-strategies/

be achieved;

V. where applicable, flood flow routes will be improved such as through the removal of obstructions;

VI. where applicable, there will be no detriment to the integrity of existing flood defences and that access to allow for their future maintenance or improvement will not be impeded

VII. they accord with the policies contained in the River Severn, Severn Tidal Tributaries and Thames Catchment Flood Management Plans; and

VIII. any mineral processing plant, associated building(s), and / or equipment should be designed to remain operational, safe for users, and flood resilient during a flood event.

Mineral development proposals will only be permitted in areas of flood risk (Flood Risk Zones 2, 3a or 3b) having taken into account climate change, where they have passed the Sequential Test and, where applicable, the Exception Test as set out in national policy.

Mineral development proposals involving sand and gravel working along with water-compatible development[158] may be appropriate within 'Flood Risk Zone 3b' or any identified 'functional floodplain', providing that: -

- there will be no net loss in flood storage and flood risk reduction measures (betterment opportunities) are provided where possible;
- there will be no impediment to water flow routes; and
- any mineral processing plant, associated building(s), and / or equipment is designed to remain operational, safe for users, and flood resilient during a flood event.

[158] Water compatible development types other than sand and gravel working is set out under Planning Practice Guidance (PPG), Flood risk and coastal change section, paragraph 066,reference ID: 7-066-20140306)

Mineral development proposals in areas of flood risk and where they exceed 1ha must be accompanied by a Flood Risk Assessment (FRA) that ~~will~~ shows how the risk of flooding on-site and elsewhere from all sources will not increase and, where possible could be reduced. The FRA must identify and assess the following: -

- all current and future sources of flooding, appropriately taking into account the anticipated impacts of climate change;
- how flood risk on-site and elsewhere will be effectively managed for the lifetime of the proposal including during site restoration and aftercare; and
- identify measures to prevent increased flood risk including through the use of sustainable drainage systems (SuDS) and compensatory works if any loss of flood storage capacity is expected to occur.

Contributes to the delivery of plan objectives 

Interpretation and implementation

316. National policy advocates the location of development including for minerals, away from areas at the highest risk of flooding wherever it is possible to do so. This will contribute to the avoidance of the increased risk of flooding for both people and property[159].

317. Applying a sequential test provides the mechanism for steering development towards areas of the lowest probability of flooding. Minerals development proposals that are not contained within the plan's allocations, including those for ancillary and / or supporting infrastructure (e.g. processing plant) must undergo a sequential test before deciding upon a preferred location.

318. Minerals can only be worked where they occur and their development could prove crucially important in delivering other national policy objectives such as ensuring

[159] Footnote: - National Planning Policy Framework (NPPF) 2012, section 10, paragraph 100

steady and adequate supplies of minerals are maintained. Therefore, geological constraints may be a major influence in assessing the outcome of sequential tests.

319. An exception test may also be applicable, but only in certain circumstances where particular development proposals cannot meet the sequential test requirements[160]. An exception test affords the opportunity to retain the effective management of flood risk in more vulnerable flood risk areas, whilst allowing some types development to take place.

320. The Gloucestershire Strategic Flood Risk Assessment (Glos-SFRA) provides detailed guidance on the application of the sequential test across the county[161]. It is an important local technical planning document, which is fundamental to the implementation of policy DM4.

321. Surface Water Management Plans (SWMPs) have been prepared for parts of Gloucestershire[162]. These provide enhanced flood-related information including the risk of surface water flooding. The Environment Agency (EA) has also prepared 'Flood Map for Planning' and updated 'Flood Map for Surface Water' (uFMfSW) and several strategic-scale Catchment Flood Management Plans (CFMPs), which cover Gloucestershire and bordering local authority flood areas[163]. This information should be considered alongside the Glos-SFRA when assessing the flood risk of individual proposals.

322. Mineral development proposals must be able to demonstrate how an increase in flood risk at their immediate location, elsewhere and in the future – (taking into account the impacts of climate change) will not occur. Climate Change Allowances have been published by the Government and these must be applied unless exceptional circumstances indicate alternative local assessments would be more appropriate. Engagement with the EA in respect of this matter will be necessary and should be undertaken at the earliest opportunity. All elements of minerals development must

[160] Specific details about the types of development and applicable levels of flood risk for considering an exception test are set out in Department for Environment, Food & Rural Affairs and Environment Agency, Guidance on Flood risk Assessment: the sequential test for applicants – https://www.gov.uk/guidance/flood-risk-assessment-the-sequential-test-for-applicants#the-exception-test

[161] The Gloucestershire Strategic Flood Risk Assessment (Glos-SFRA) Level 1 *(specifically for minerals & waste)* can be obtained at: - http://www.gloucestershire.gov.uk/planning-and-environment/flood-risk-management/flood-planning-information/

[162] 6 Surface Water Management Plans (SWMPs) have been completed and published by GCC in its capacity as the Lead Local Flood Risk Authority (LLFRA). The areas include: - Cheltenham, Tewkesbury, Bishops Cleeve, Southam & Woodmancote, Gloucester, and Churchdown & Innsworth. Gloucestershire's SWMPs can be obtained at: - http://www.gloucestershire.gov.uk/roads-parking-and-rights-of-way/plans-policies-procedures-manuals/surface-water-management-plans/

[163]The updated Flood Map for Surface Water (uFMfSW) (2013) can be obtained at: - https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/297432/LIT_8988_0bf634.pdf. The River Severn CFMP, Severn Tidal Tributaries CFMP and Thames CFMP can be obtained at: - https://www.gov.uk/government/collections/catchment-flood-management-plans

form part of the assessment of flood risk, including all built structures, the working of minerals themselves and also the carrying out of restoration and aftercare[164].

323. The nature of mineral working including restoration has the potential to influence flood risk way beyond site boundaries. It can have an impact on local hydrological processes through affecting infiltration rates that cause or contribute towards changes in surface runoff – a major influence on the time taken and the volume of water that travels from the land to rivers, streams and other water bodies. As a result the impact on nearby road, recreational routes and other areas that are vulnerable to increased surface runoff, combined with the known flood conditions of surrounding areas should be assessed and any additional off-site risks identified. Heightened flood risks should be avoided wherever possible, although suitable mitigation measures may be acceptable.

324. Flood risk mitigation may include the installation of sustainable drainage systems and or the provision of, or contribution towards the delivery of other flood prevention and management infrastructure. In all instances plans for the adoption, ongoing maintenance and management of mitigation measures will need to be submitted, which could involve having to make arrangements for legally-binding agreements with key interested parties. In determining the right package of flood risk mitigation, a strategic view should also be taken alongside a carefully considered analysis of the flood risk circumstances of the site and within the surrounding locality. Adopting a Catchment Based approach to the consideration of mitigation offers the best way of achieving this.

325. Mineral development proposals can make a contribution to reducing the risk of flooding in an area. This can occur through well-planned and executed sequential working and site restoration that will contribute towards climate change resilience by way of additional flood storage and attenuation. Subject to site constraints, environmental limitations and taking account of other local policy objectives, opportunities to achieve net increases in flood storage capacity should be taken up wherever reasonable and practicable to do so[165]. Incorporating flood risk betterment that demonstrates innovative approaches above the statutory minimum where feasible and pragmatic to do so will also be viewed favourably.

326. The MPA will look to the advice of the Environment Agency and the Lead Local Flood Risk Authority when assessing the significance of flood risk with mineral development

[164] SuDS are an acronym of Sustainable Urban Drainage Systems. However, development of flood strategy and policy over the recent years has expanded the practice of apply a SuDS approach. As a result the reference to 'urban' has been largely dropped from general use.

[165] In certain mineral resources locations in Gloucestershire, very careful consideration will need to be taken for those proposals that may offer flood storage enhancement restoration opportunities (e.g. through facilitating 'wet' restoration). These could equally result in negatively impacting aviation safety by encouraging species of birds known to exacerbate the risk of bird-strike (see MLP policy DM11).

proposals[166]. National guidance has been produced setting out standard consultation practice in respect of this matter[167]. However, this does not preclude further advice from these bodies being sought on an individual basis.

327. National guidance on how best to assess flood risk with planning proposals has also been produced[168]. This includes the requirements for carrying out a FRA. Thresholds for FRA submissions are specified within national policy[169] and a detailed checklist of minimum FRA content has been included within planning practice guidance[170].

[166] The Lead Local Flood Risk Authority (LLFRA) for Gloucestershire is Gloucestershire County Council
[167] Department for Environment, Food & Rural Affairs and Environment Agency, Guidance: Flood risk assessment: local planning authorities (updated Feb 2017) – https://www.gov.uk/guidance/flood-risk-assessment-local-planning-authorities
[168] Department for Environment, Food & Rural Affairs and Environment Agency, Guidance: Flood risk assessment: local planning authorities (updated Feb 2017) – https://www.gov.uk/guidance/flood-risk-assessment-local-planning-authorities
[169] National Planning Policy Framework (NPPF) 2012, section 10, paragraph 103, footnote 20.
[170] Planning Practice Guidance (PPG) flood risk and coastal change section, paragraph: 030, reference ID: 7-030-20140306 and paragraph: 031, reference ID: 7-031-20140306.

Water resources

Reasoned justification

328. Gloucestershire's water resources are widespread and inter-connected. They cover over 5,000km of surface watercourses and a number of sizeable groundwater aquifers.

329. Several principal rivers run through the county – the Severn, Wye, Avon and Thames. There is also an extensive network of smaller watercourses. Gloucestershire is sited within two nationally recognised river basin areas – the Severn and the Thames[171]. Natural habitats and wildlife areas, including some of national and international importance, are also hugely reliant upon the quality and reliable quantity of Gloucestershire's watercourses.

330. Large areas of Gloucestershire sit above designated Principal and Secondary Aquifers that contribute to drinking water supplies[172]. These areas are predominately, but not exclusively found in the south west of the county, and also contain a number of designated Groundwater Source Protection Zones (SPZs) that highlight sources of public drinking water. The key focus of SPZs is to reduce contamination risk from surrounding activities[173].

331. In addition, several statutory and non-statutory Drinking Water Safeguarding Zones (DW-SZs) also exist within the county. The EA and water companies target these zones when combating contamination risks and seeking to avoid costly additional treatment and water management infrastructure[174].

332. Mineral developments have the potential to impact on water resources. Mineral working and / or the removal and storage of overburden and soils, and de-watering operations could influence groundwater recharge and depletion rates as well as the dynamic of surface water flows. Significant volumes of water may be required in the washing of minerals and other processing activities. The use of industrial machinery and vehicles could also heighten water pollution risks affecting both surface and groundwater resources.

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[171] England & Wales River Basin Map (Oct 2015) which has been published by EA can be obtained at : - https://www.gov.uk/government/publications/river-basin-district-map

[172] As of April 2010 aquifer designations in the England was re-classified into Principal and Secondary, with further sub-divisions of the Secondary type. This change was to ensure greater consistency with the Water Framework Directive. Designation is determined by virtue of the importance of the aquifer as a resource for drinking water supplies, supporting surface water flows and wetland ecosystems.

[173] Detailed groundwater mapping information (Aquifers and Source Protection Zones) for England, including Gloucestershire, can be obtained from the Environment Agency's *'What's In Your Backyard'* web-resource at: - http://apps.environment-agency.gov.uk/wiyby/117020.aspx

[174] Detailed information on zoning for drinking water safeguarding can be obtained from the Environment Agency's web-resource at : - http://maps.environment-agency.gov.uk/wiyby/wiybyController?topic=drinkingwater&layerGroups=default&lang=_e&ep=map&scale=5&x=531500&y=181500#x=531500&y=181500&lg=2,3,&scale=5

Policy DM05 | Water resources

Mineral development proposals will be permitted where it can be demonstrated: -

I. there will be no decline in water quality that would lead to a deterioration of EU Water Framework Directive (WFD) water body status and that measures to improve water quality and water body status will be incorporated wherever possible to help achieve good ecological status;

II. measures will be incorporated to enhance and protect water quality, including Gloucestershire's groundwater resources;

III. the actions and objectives set out in the Severn and / or Thames River Basin Management Plan (RBMP) will be supported in striving to protect and improve the quality of water bodies;

IV. unless justifiable and agreeable change is achievable to the physical integrity of watercourses[175], they will be preserved and wherever possible enhanced, including riverside habitats. Where necessary, management and mitigation measures will be incorporated to improve and / or enhance water quality and habitats of aquatic environments in or adjoining the development site; and

V. wherever possible, measures to achieve the efficient use of water will be delivered including incorporating appropriate water conservation techniques.

Contributes to the delivery of plan objectives 

Interpretation and implementation

333. The Water Framework Directive (WFD) sets the overarching policy for protecting and improving the water quality and ecological health of all water bodies – rivers, lakes,

[175] A watercourse is defined as any channel through which water flows. Watercourses can be natural or man made, open on the surface or enclosed. Watercourses serve to drain the land and can assist in supporting flora and fauna. They include rivers, brooks, becks, ditches, streams, leats, goyles, rhynes and culverts.

canals, estuaries and coastal and ground waters throughout the UK. It requires there to be at least no deterioration in the status of all water bodies and presently sets a target to achieve at least 'Good Status' for all by 2027[176].

334. Reflective of WFD requirements, national policy advises on the need to prevent mineral development proposals from having unacceptable adverse impacts on the quantity and flow of surface and ground water and the migration of contamination[177]. More generally it also seeks to prevent all types of development from causing or contributing to unacceptable levels of water pollution[178].

335. Mineral development proposals may benefit from a hydrological and hydrogeological assessment that incorporates an analysis of water quality and quantity . The assessment must be carried out where it is anticipated water quality impacts pose a significant planning concern. In certain circumstances a specific WFD Compliance Assessment may also be necessary. A WFD Compliance Assessment will need to consider biological quality, physio-chemical conditions and hydro-morphological conditions of surface water bodies and quantity and chemical status of groundwater bodies. In line with planning practice guidance, the assessment of water quality should be undertaken where a proposal involves the physical modification of a water body and / or could indirectly affect a water body. Key aspects of the assessment should include the nature of potential adverse impacts upon identified water bodies and the options for reducing impacts to acceptable levels including an analysis of the delivery of effective and deliverable mitigation measures. The overarching objective must be to demonstrate at least, how the current WFD status of identified water bodies will not suffer any deterioration.

336. The assessment of water quality and quantity impacts will need to pay particular attention should be paid, where relevant to the Severn River and / or Thames River Basin Management Plans[179]. These plans implement the WFD at the sub-national level by way of a catchment-based approach to water management, which will ensure a holistic view is taken over hydrological influences affecting a larger-than-local area. A catchment-based approach to water management is encouraged through planning practice guidance[180]. The Severn River and Thames River Basin Management Plans identify key technical information concerning the hydrological characteristics of Gloucestershire and surrounding areas. They set out actions to be taken to ensure improvements, where possible, or to secure there is no deterioration in the quality of

[176] The Water Environment (Water Framework Directive) (England and Wales) Regulations 2003 – http://www.legislation.gov.uk/uksi/2003/3242/contents/made
[177] National Planning Policy Framework (NPPF) 2012, section 13, paragraph 143, bullet point 6
[178] National Planning Policy Framework (NPPF) 2012, section 11, paragraph 109, bullet point 4
[179] The Severn River District and Thames River District River Basin Management Plans (current versions published in February 2016) can be obtained at: - https://www.gov.uk/government/collections/river-basin-management-plans-2015
[180] Planning Practice Guidance (PPG), water supply, wastewater and water quality section, paragraph: 002, reference ID: 34-002-20140306

water bodies from their current status. The plans also consider the means of delivering improved water quality status. Consequently, Mineral development proposals should incorporate measures wherever possible, that will contribute to the ambitions outlined within the relevant River Basin Management Plan.

337. Mineral development proposals involving dewatering activities should be supported by detailed technical evidence as part of a wider hydrological and hydrogeological assessment. The approach put forward must accord with advice published on this matter by the Environment Agency[181]. Furthermore, for locations, which contain significant archaeological deposits, potential risks associated with dewatering will need to be careful scrutinised. Where minerals development proposals could affect watercourses, it will always be preferable for their physical integrity to be preserved. The provision of 'stand-off' strips or areas between the banks of the watercourse affected and mineral working may be an effective means of achieving this and might also present a number of complementary activities. Through the appropriate treatment of stand-off areas, visual and / or landscape impacts of mineral developments could be reduced (see policies DM01 and DM09). Stand-off areas may also be used to positively contribute to the management of flood risk (see policy DM04) and / or facilitate tangible biodiversity enhancements that will positively contribute to the connectivity and environmental integrity of the county's multi-functional green infrastructure network (see policy DM06) that in turn may aid the delivery of ecological improvements to the status of water bodies. In the event that the integrity of a watercourse may be unavoidably affected, robust and credible evidence to justify this matter must be provided. All proposals under these circumstances will be rigorously scrutinised including through consultation with the Environment Agency and / or the Lead Local Flood Authority where necessary, to ensure that an acceptable and deliverable scheme is brought forward that will secure the least amount of change and / or alteration possible.

338. Early engagement with the County Council as the Mineral Planning Authority, the Environment Agency, the Lower Severn Internal Drainage Board[182] and relevant local water and sewerage companies is strongly encouraged. This can help to establish if water resources are likely to be a significant planning concern with minerals development proposals and, if so, to clarify the scale and recommended content of a supporting hydrological and hydrogeological assessment. The Environment Agency has also provided a number of sources of information to assist in the initial

[181] Hydrogeological Impact Appraisal for Dewatering Abstractions (2007) can be obtained at: - https://www.gov.uk/government/publications/hydrogeological-impact-appraisal-for-dewatering-abstractions

[182] The Lower Severn Internal Drainage Board (LSIDB) is responsible for over approximately 21,000 ha of land (including parts of Gloucestershire) alongside the Rivers Severn, River Frome in the Stroud Valley. They are charged with responsibilities for the management and maintenance of flood defence and drainage systems, mostly in sensitive low lying areas. Their activities include the improvement and maintenance of rivers, drainage channels and pumping stations. More details concerning the LSIDB can be found at: - http://www.lowersevernidb.org.uk/

determination of water resources risks. These include flood and coastal risk management plans and strategies, abstraction management, groundwater vulnerability maps and the location of source protection zones[183].

339. To facilitate the effective management of water resources and support climate change resilience, minerals development proposals should adopt measures to improve the efficient use of water following best practice methods. Rain water harvesting, the recycling of water and the provision of storage facilities are common approaches that could be employed. In the case of water storage, replenishment of reservoirs during the wetter winter months or periods of more intense rainfall may contribute to the supply of water needed for mineral washing and dust suppression systems during drier summer periods or when drought conditions prevail.

[183] The Environment Agency has published a wealth of information related to water resource issues that can be obtained online. For matters relating to flood and coastal change this can be obtained at: - https://www.gov.uk/topic/environmental-management/flooding-coastal-change . For water abstraction this can be obtained at: - https://www.gov.uk/guidance/water-management-abstract-or-impound-water#water-abstraction . For groundwater vulnerability mapping this can be obtained at: - https://www.gov.uk/government/publications/updated-groundwater-vulnerability-maps-improvements-to-methodology-and-data . For Source Protection Zone information this can be obtained at: - http://apps.environment-agency.gov.uk/wiyby/37833.aspx .

Biodiversity and Geodiversity

Reasoned justification

340. Gloucestershire is renowned for its rich and diverse natural environment made up of individual species, habitats, ecosystems, geological landforms and features. A number of assets are of international and / or national significance and afforded special protection enshrined in UK law.

341. A total of 11 internationally important sites, currently known as 'European Sites', which have been designated as either Special Areas for Conservation (SACs) or Special Protection Areas (SPAs) fall within the county and / or lie within it's sphere of influence (e.g. no more than 15km away). Two of these sites are also designated as Ramsar sites – wetlands of international importance that from a UK Government viewpoint are treated in the same manner as SACs and SPAs[184].

342. Internationally important nature conservation designations affecting Gloucestershire are subject to specific legal requirements, from a planning perspective, that go beyond the consideration of individual development proposals. All emerging plans and strategies must be confident that their proposed actions, if adopted, will not have a likely significant effect upon any European Site and if necessary be able to demonstrate that they will not adversely affect the integrity of such sites.

343. Gloucestershire's national nature conservation designations include about 100 Sites of Scientific Interest (SSSIs), notified for their biological and / or geological interest, and four National Nature Reserves (NNRs) – important habitats that contain valuable species and geology and have research potential. SSSIs are protected by the Wildlife and Countryside Act 1981 (as amended) as are numerous plants, birds and other species that are resident to Gloucestershire. Some species which are particularly threatened or declining are afforded additional 'European Protected Species' status under the Conservation of Habitats and Species Regulations 2017.

344. The county accommodates well over 750 Local Wildlife Sites (LWS), which support a diverse range of habitats and valuable linkages that allow wildlife to move across Gloucestershire. There are also around 200 Regionally Important Geological Sites (RIGS), which are the most important places for geological and geomorphological conservation outside of SSSI designations.

345. Beyond the regime for designated sites and areas of nature conservation interest, the Gloucestershire Nature Map also provides a vehicle for identifying and planning

[184] As set out within National Planning Policy Framework (NPPF) 2012, section 11, paragraph 118, bullet point 6 and DEFRA Circular 01/2005

enhancements to the county's wider ecological network[185]. However this will be evolved during the local plan period into a new ecological and nature recovery network which is being created by the Gloucestershire Local Nature Partnership. The mapping work of the Gloucestershire Local Nature Partnership has assisted in the identification and formation of several Gloucestershire Nature Improvement Areas (NIAs). Local NIAs contain active partnerships that are restoring nature through joint co-ordinated action.

346. All parts of the county that fall outside of a nature conservation designation or a wider area identified by the Gloucestershire Local Nature Partnership, may still contain biodiversity value worthy of conserving or enhancing. The provisions of the Natural Environment and Rural Communities (NERC) Act 2006 places a duty on all public authorities to consider the purposes of conserving biodiversity whilst carrying out their functions and so is relevant to the Minerals Local Plan. This duty is in additional to complying with legislative requirements related to biodiversity but also to conserving priority habitats and species on the English List (Section 41, NERC Act).

347. Future development proposals, including those related to minerals, pose a potential threat to the habitats, wildlife, wider ecosystems and geological features and occurrences, which collectively make up Gloucestershire's natural environment. The fundamental action of removing materials and reshaping landforms will physically eradicate and / or irreversibly alter the conditions for biodiversity and geodiversity to thrive and for habitats and linkages to function effectively to deliver their respective ecosystem services. Operational impacts such as light, noise, dust, air and water pollution may also have similar significant impacts particularly where more sensitive and less resilient habitats, species and geological features are present.

348. However, mineral developments also present tangible opportunities to secure enhancements to Gloucestershire's natural environment including positively contributing to the connectivity and environmental integrity of the county's multi-functional green infrastructure network. This is possible throughout a mineral site's life cycle, although it is particularly relevant where final or sequential restoration is being considered. Policy MR01 covering mineral site restoration predominantly addresses this matter.

[185] Gloucestershire Nature Map forms part of wider nature conservation online resource known as *'Gloucestershire's Natural Environment'*. It can viewed online at: - https://www.gloucestershirenature.org.uk/nature-map

Policy DM06 | Biodiversity and Geodiversity

Part a | Biodiversity and Geodiversity outside of designated areas

Mineral development proposals that demonstrate the conservation of biodiversity and/or geodiversity, in addition to providing net gains where possible, will normally be permitted. Potential adverse impacts on natural environment assets must be avoided or satisfactorily mitigated in line with Gloucestershire Local Nature Partnership objectives. Exceptionally, where an impact cannot be avoided or mitigated, then compensatory measures including the use of offsets for habitat or geological feature losses will be considered Irreplaceable habitat and geological assets must be retained and protected from deterioration unless this cannot be avoided because there are exceptional overriding reasons of demonstrable public benefit.

Part b | Designated sites and protected species

Mineral development proposals which, alone or in combination with other plans and projects, are likely to have a significant effect on any Internationally Important Site designated as a Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar site will only be permitted, where they have been subject to an Appropriate Assessment, which has determined that either:-

I. there will be no adverse affect upon the integrity of such designated sites; or

II. where adverse effects on integrity have been concluded, has satisfactorily addressed the subsequent stages in the Habitats Regulations Assessment (HRA) process as set out in table 4, which present imperative reasons of overriding public interest.

Mineral development proposals will only be permitted within designated Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) and in localities that could have an impact upon such designations, where it can be demonstrated: -

I. there will be no conflict with the conservation, management and enhancement of a designation;

II. that any potentially harmful aspects of mineral development can be satisfactorily mitigated; and

III. there would be no wider indirect and/or cumulative impact on the national network of SSSIs; or where the benefits of mineral development clearly outweigh the potential adverse impacts upon the key features of any designation.

Mineral development proposals on local sites that include Local Nature Reserves (LNR), Gloucestershire Local Wildlife Sites (LWS) and Regionally Important Geological Sites (RIGS) and in localities that could have an impact upon such designations will be permitted where it can be demonstrated: -

I. adverse impacts can be avoided and /or satisfactorily mitigated; or

II. where the benefits of minerals development clearly outweigh the potential adverse impacts upon the key features of any designation.

Mineral development proposals that could adversely affect legally protected species will only be permitted where it can be demonstrated that suitable safeguarding measures will be provided.

Contributes to the delivery of plan objectives 

Interpretation and implementation

349. National policy requires balanced judgements to be made concerning the relationship between new development and the natural environment. The overarching aim is to conserve and enhance biodiversity and to prevent harm to geological conservation interests[186].

350. To meet the requirements of policy DM06 mineral development proposals must be supported by robust evidence regarding biodiversity and where relevant, geodiversity impacts. Assessments must be prepared having regard to the nature conservation hierarchy present across the county and within its sphere of influence. Key matters that need to be addressed, include: -

[186] National Planning Policy Framework (NPPF) 2012, paragraph 117, bullet point 4 and paragraph 118;

- an understanding of the status, condition and potential vulnerability of any designated sites and undesignated areas of noteworthy biodiversity value that may be affected;

- the identification of any possible adverse impacts and their likely significance based on the sensitivity, relative abundance, integrity, habitat and / or species viability, and importance of biodiversity interests; and

- an appreciation of the potential overall risk of harm having carefully considered the potential of habitat and / or species loss, the proportion that these losses constitute international / national and / or local resources, and whether losses would be permanent or could be made temporary through the realistic and reasonable prospect that habitat and / or species regeneration may be achieved.

351. In addition, biodiversity and geodiversity assessments must evaluate how mineral development proposals are able to avoid and / or mitigate possible adverse impacts deemed likely to generate harm to biodiversity in general, and / or, which would affect the defining features of designated sites[187]. Where relevant, evidence to support any proposed application of compensation measures must show how these would only be pursued as a last resort in response to residual harm that cannot or may not be entirely mitigated[188]. Biodiversity offsetting should ideally be locally-orientated, aligned with the aims and objectives of the overarching Gloucestershire Local Nature Partnership, and meet the aspiration of achieving an overall net gain in biodiversity. Evidence of partnership working in preparing biodiversity offsetting schemes, with local conservation groups and national and / or more strategic-scale organisations pursing interest that will positively impact on Gloucestershire including the effective functioning of the county's green infrastructure network will be given weight in the decision making process.

352. Internationally important sites of nature conservation within the county or that lie within its sphere of influence must be assessed to determine whether they are likely to be affected by mineral development proposals. This may culminate in a requirement to complete a Habitats Regulations Assessment (HRA). The key preparations stages are detailed below in table 4.

[187] National Planning Policy Framework (NPPF) 2012, paragraph 118, bullet point 1 and 2;
[188] National Planning Policy Framework (NPPF) 2012, paragraph 118, bullet point 1;

Table 4 | The key stages in the analysis of mineral development proposals in order to successfully complete a Habitats Regulations Assessment (HRA)

HRA or Internationally Important Sites Impact Assessment Process Key Stages for a Development Project	
Stage One	
Screening	• Identify European (International) Sites in and around the development site that might be affected by the proposals directly or indirectly • Examine qualifying features & conservation objectives • Identify potential effects on European (International) Sites from development. • Take account of the potential 'in-combination' effects of other plans and projects
	ACTION ↓
	• If there are no likely significant effects on a European (International) Sites then this is recorded and progression to Stage Two is <u>not</u> required. • If significant effects are judged likely or some uncertainty exists – the precautionary principle applies and progression to Stage Two is required unless the development is dropped or modified so that significant effects would not be likely to occur.
Stage Two	
Appropriate Assessment (AA)	• Collate information on European (International) Sites and evaluate impacts in the light of conservation objectives. • Consider how the development 'in-combination' with other plans and projects will interact when implemented. • Consider how adverse effects on integrity (AEoI) of the European (International) Sites could be avoided by changes to the development including any alternatives and mitigation measures such as details about timescales and mechanisms.

	ACTION ↓
	• Report outcomes of AA giving consideration to alternatives and the development of mitigation measures. • If the AA conclusion is that the development <u>will not</u> have AEoI of European (International) Sites then consider if any monitoring is needed before completing the HRA. • If the AA conclusion is that the development <u>will</u> have AEoI of European (International) Sites then refuse the development or proceed to Stage Three.
Stage Three	
Derogation	• Despite the conclusion of AEoI a derogation in certain special circumstances can allow the development to be consented but this requires 3 tests to be met: - o Test 1: There must be no feasible alternatives; o Test 2: There are 'imperative reasons of overriding public interest' (IROPI); o Test 3: All necessary compensatory measures can be secured to ensure that the overall coherence of the network of European (International) Sites as a whole will be protected.

353. As highlighted in national policy, irreplaceable habitats including ancient woodland and aged or veteran tress found outside of ancient woodland, which clearly cannot be replaced should not be subject to loss or deterioration in condition. However, in extreme circumstances where a significant public benefit can be proven, which clearly overrides the loss or deterioration of irreplaceable habitats, development may be acceptable[189]. Standing advice prepared by Natural England and the Forestry Commission on development with ancient woodland and veteran trees should be reviewed at the earliest possible opportunity and ideally at the pre-application stage[190].

354. Mineral development proposals can contribute to the achievement of net gains in biodiversity and deliver enhanced protection for habitats and species and / or the

[189] National Planning Policy Framework (NPPF) 2019, paragraph 175
[190] National Guidance on Ancient woodland and veteran trees: protecting them from development can be obtained at: - https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences

expansion and conservation of geological interests. This can be achieved either through the implementation of mitigation measures or site restoration. In line with national policy, weight may be given to proposed actions that will bring about local and landscape-scale preservation and restoration and / or the re-creation of priority habitats, ecological networks and the protection and recovery of priority species[191].

355. Particular weight may be given to opportunities aligned with the aims and objectives of the Gloucestershire Local Nature Partnership, which support the recovery of ecological networks, improved green infrastructure and Nature Improvement Areas (NIAs)[192]. Technical evidence to support site restoration strategies and their planned implementation, as required under policy MR01, could be applicable in this instance.

[191] National Planning Policy Framework (NPPF) 2012, paragraph 117, bullet points 1 and 3

[192] Local information concerning the initiatives supported by the Gloucestershire Local Nature Partnership (G-LNP) can be obtained at: - http://gloucestershirenature.org.uk/index.php

Soil resources

Reasoned justification

356. Soil is a finite multi-functional, natural resource that underpins our well-being and prosperity. It provides many essential services such as food and timber production, is an aid to water management (flooding and water quality), and is an important element in supporting thriving and sustainable ecosystems, promoting biodiversity and helping to deliver green infrastructure. As a store of carbon it also has a pivotal role to play in tackling climate change[193].

357. Gloucestershire is predominately a rural county and makes a regionally significant contribution to the UK's agricultural economy[194]. It is known to contain valuable soil resources of the highest quality grades (i.e. grades 1, 2, 3a) based upon the national Agricultural Land Classification (ALC) system. This is a rating mechanism that considers the range of crops that can be grown, the level and consistency of their yields and the cost of obtaining them. The highest grade soil resources are collectively known as Best and Most Versatile Agricultural Land (BMVAL) and should be afforded protection to serve current needs and those of future generations.

358. Mineral developments can pose a risk to the quality and quantity of all soil resources including those which are classified as BMVAL. The physical removal of soils (i.e. stripping) is necessary to allow access to underlying minerals, but this can severely degrade the resource if not properly handled, appropriately stored and then restored after working has ceased. Heavy machinery associated with all aspects of mineral development can also be a cause of damaging effects such as compaction.

359. Contamination and degradation risks through the use of machinery and related transport activities may also arise with minerals development. This can spread to surrounding soils, even if they have not been physically disturbed. It is important therefore soil management issues are properly taken into account with minerals development proposals including actions to avoid and mitigate possible adverse impacts, but also to secure the long-term viability of soil resources through mineral restoration and aftercare.

[193] The strategic significance of soils is set out within Safeguarding our Soils: *A Strategy for England* prepared by DEFRA (2009) and which can be obtained at: - https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69261/pb13297-soil-strategy-090910.pdf

[194] According to the DEFRA data release (Dec 2017): - *The structure of the agricultural industry in England and the UK at June (updated to 2016)* Gloucestershire made up 11% of the South West's total farmed area and supported about 10% of the region's agricultural workforce. The DEFRA data release can be obtained at:- https://www.gov.uk/government/statistical-data-sets/structure-of-the-agricultural-industry-in-england-and-the-uk-at-june

Policy DM07 | Soil resources

Mineral development proposals will be permitted where they have been informed by and are sympathetic to the protection of soil resources by demonstrating: -

I. unacceptable adverse impacts on the quality of soil including as a result of disturbance and / or from contamination will be avoided or satisfactorily mitigated; and

II. wherever possible, measures to achieve improvements in soil quality will be delivered; and

III. where Best and Most Versatile Agricultural Land (BMVAL) is present, it will be avoided, or where this is not possible, it will be restored to the highest quality grade possible unless in doing so, beneficial restoration that outweighs the importance of protecting soil resources would be compromised; or

IV. the overall benefits of minerals development will clearly outweigh unacceptable adverse impacts on the quality of soil and / or opportunities to achieve soil quality improvements to justify of planning permission being granted.

Contributes to the delivery of plan objectives 

Interpretation and implementation

360. Policy DM07 will ensure soil resources are appropriately taken into account with mineral development proposals. As required in national policy, valuable soils that contribute to the natural environment should be protected and where possible enhanced[195].

361. Establishing the value of underlying soils or those within the sphere of influence of mineral developments should be an integral part of supporting evidence for a planning proposal. A wealth of strategic-scale information is publicly available and this may

[195] National Planning Policy Framework (NPPF) 2012, paragraph 109, bullet point 1

assist initial, preliminary reviews of soils. Natural England has published regional ALC Maps including for the South West[196]. There is also the Land Information System (LandIS), which contains information on soils throughout the UK including Soilscapes – a national thematic soil type dataset[197,198].

362. The requirement to prepare a site-specific Soil Survey and ALC report and the level of detail that will be needed will be made on a case-by-case basis. The matter should therefore be investigated at the early stages of preparing a proposal. The requirement to prepare a site-specific report will be founded upon the size and scale of the minerals development being proposed and an analysis of any initial review of existing information to establish the value of soil resources that might be affected, including the presence, relevance, accuracy and reliability of previous local-level soil studies. Natural England maintains an archive of more detailed ALC surveys for selected locations. This can be reviewed via the Multi-Agency Geographic Information for the Countryside web resource[199]. All site-specific reports that are prepared must be in accordance with national published guidelines in place at the time[200].

363. Where soil resources of value are identified, particularly those classified as BMVAL, careful consideration must be given to the extent to which they can be protected. Avoiding their disturbance will always be the favoured option. This approach accords with national policy, which seeks development to be directed towards poorer quality of land ahead of that of a higher quality[201]. However, in determining whether it is reasonable and justified to safeguard soil resources, decision makers will consider the wider minerals planning context. This is concerned with the need for the working of minerals, the fact that mineral resources can only be worked where they occur, and the possibility that suitable mitigation could sufficiently minimise the extent of and / or reduce the severity of adverse impacts upon soils. The assessment of the relevant criteria for mineral supply-related policies MW01 to MW05, MR01 and / or MA02 may be relevant in this instance.

364. The requirement for mineral developments to be subject to restoration and aftercare presents an opportunity for the long-term protection and enhancement of soil resources. In line with national policy, it is expected that proposals explore the future agricultural viability of restored land, irrespective of intended after uses being

[196] Natural England through its 'Access to Evidence' web resource has published sub-national scale (1:250 000) agricultural land classification (ALC) maps including for the South West of England. This shows the coverage of different grades of agricultural land from 1-5 - http://publications.naturalengland.org.uk/publication/144017?category=5954148537204736.
[197] Land Information System (LandIS) is presently hosted by Cranfield University and can be obtained at: - http://www.landis.org.uk/index.cfm
[198] Information on Soilscapes for England and Wales can be obtained at: - http://ukso.org/SoilsOfEngWales/englandAndWales.html
[199] The Multi-Agency Geographic Information for the Countryside (MAGIC) can be obtained at: - http://magic.defra.gov.uk/home.htm
[200] Presently this is contained within Agricultural Land Classification of England and Wales: revised guidelines and criteria for grading the quality of agricultural land (MAFF, 1988).
[201] National Planning Policy Framework (NPPF) 2012, paragraph 112

considered at that time[202]. This could be materially significant if potential adverse impacts on soil resources resulting from site preparation and mineral working phases could be reversed and / or soil quality improvements can be facilitated that would outweigh the scale and significance of any adverse impacts. Ideally a holistic approach to post-mineral working matters incorporating soil resources should be taken linked to the wider ambitions of achieving high quality and sustainable mineral restoration as set out under policy MR01.

365. For soil resources that are likely to be subject to physical disturbance and / or could be put a risk of contamination, great care must still be taken to ensure the integrity of existing soil quality is maintained as much as is practicability possible. If soil degradation is unavoidable this must be kept to a minimum. Contamination giving rise to unacceptable adverse impacts on soil resources must always be prevented. Robust evidence on the movement of soils will be required to accompany mineral development proposals. This should be prepared in accordance with national good practice guidance and preferably set out in a dedicated and detailed Soil Handling Strategy[203].

[202] National Planning Policy Framework (NPPF) 2012, paragraph 143, bullet point 7

[203] Presently this is contained within the 'Good Practice Guide for Handling Soils' and Guidance for Successful Reclamation of Mineral and Waste sites.' published by the Department for Environment, Food and Rural Affairs (DEFRA).

Historic environment

Reasoned justification

366. Gloucestershire contains heritage assets of international, national and local significance. The county has over 500 scheduled monuments, nearly 13,000 listed buildings and structures of various grades, several hundred conservation areas, and over 30,000 other notable archaeological sites documented on the Gloucestershire Historic Environment Record (G-HER)[204].

367. The historic environment makes an invaluable contribution towards defining '*Gloucestershire'* and establishing the individuality and / or connectedness of local places within it. Heritage assets and their setting, along with archaeological remains are important, irreplaceable features that help in our understanding of the past, and to make better sense and enjoyment of the present.

368. The working of minerals can be an intensive activity with major implications for the historic environment. Its extractive nature often over a large land-take can leave few options to avoid impacts, particularly when considering the quality and quantity of resource as a whole. Key risks associated with working may include the direct loss of assets or their partial damage, indirect damage through wider hydrological impacts and / or degradation of quality caused by vehicular and machinery emissions or other disruptive activities.

369. National policy is clear that heritage assets should be conserved, but in a manner that is appropriate to their significance[205]. It also provides a definition of *'significance'* from a heritage perspective – a measure of value attributed to assets based upon their archaeological, architectural, artistic and / or historic interest both in physical form and also by way of their setting[206]. Practice guidance offers further details on delivering conservation through a flexible approach to facilitating the maintenance of assets and their effective management in the presence of change[207].

370. Legislation specifically concerning the protection of designated heritage assets is also in place. Of relevance to Gloucestershire and the plan, are the legal protections afforded to listed buildings and conservation areas and scheduled monuments[208].

[204] Gloucestershire's Historic Environment Record (G-HER) can be viewed online at: - http://www.gloucestershire.gov.uk/planning-and-environment/archaeology/request-archaeological-data-from-gloucestershires-historic-environment-record-her/
[205] National Planning Policy Framework (NPPF) 2012 section 12, paragraph 126.
[206] National Planning Policy Framework (NPPF) 2012 Annex 2: Glossary, definition of *'significance' (for heritage policy)*
[207] Planning Practice Guidance (PPG) conserving and enhancing the historic environment section, paragraph: 003, reference ID: 18a-003-20140306
[208] The Planning (Listed Buildings and Conservation Areas) Act 1990 and Ancient Monuments & Archaeological Areas Act 1979.

Policy DM08 | Historic environment

Mineral development proposals will be permitted where they conserve, and where appropriate, enhance the significance of any affected heritage asset.

The Gloucestershire Historic Environment Record should be used to inform the consideration of future development including potential conservation and enhancement measures.

Where relevant, archaeological excavation and / or the recording of historic buildings will be required, followed by analysis and publication of the results.

Scheduled Monuments and other non-designated assets of archaeological interest of equivalent importance

Scheduled monuments and other non-designated archaeological assets of equivalent importance will be expected to be preserved in situ.

Where there are no alternative options which will reduce or eliminate any adverse impact, or where scheduled monuments and other non-designated archaeological assets of equivalent importance cannot be preserved in situ, and harm is therefore unavoidable, then measures to mitigate and minimise the impact will be considered.

Contributes to the delivery of plan objectives 

Interpretation and implementation

371. In practice, designated and non-designated heritage assets require balanced judgements to be made regarding the potential scale of loss or harm caused by development including for minerals, measured against their significance. For this reason, it is vitally important that, adequate and proportionate information is available to fully understand the significance of potentially affected heritage assets (including undesignated assets).

372. However, in recognition that certain archaeological assets may not be identifiable or fully appreciated early on in the decision making process, it is reasonable for a phased approach to be adopted for assessing significance and determining the subsequent

treatment of assets, which involves initial desk-based assessment and / or field evaluations. A clear national framework for assessing the significance of heritage assets is provided by national policy, which sets out specific requirements of prospective applicants and expectations for determining planning authorities[209]. There is a necessity for the G-HER to be consulted and technical expertise should also be sought, where necessary.

373. In terms of implementing balanced judgements, the established approach is that the more important the heritage asset, the greater the weight that should be afforded to its conservation through protecting it and / or its setting from harm or loss. Heritage assets of the highest significance should only be subject to substantial harm or loss as a result of development under wholly exceptional circumstances. National policy identifies the designation types that fall into the category of highest significance[210]. It also states that for grade II listed buildings, parks or gardens substantial harm or loss caused by development must be exceptional.

374. From a minerals planning perspective, the ability to maintain steady and adequate supplies of an important mineral is a material consideration that may outweigh any substantial degree of harm caused to the significance of an affected heritage asset. Nevertheless, attempts to avoid harm should be explored wherever possible. Where minerals development proposals are deemed likely to cause less than substantial harm to the significance of heritage assets and / or their setting, consideration will be given to the degree of harm weighted against the demonstrable public benefits of the development.

375. Proposals for minerals development, which could affect heritage assets, must be accompanied by a suitably detailed assessment of heritage impacts that must have regard where relevant, to anticipated changes to local hydrology. In addition to establishing the significance of each affected heritage asset, analysing potential harm and setting out any reasoned justification for reluctantly allowing harm or loss to occur, thoroughly evidenced means and measures of how mitigating harm and the avoidance of loss should also be provided. Where heritage assets of archaeological interest may be affected, sufficient provision should also be made for their effective preservation in situ or the investigation, excavation and the recording of any finds. The preservation in situ of archaeological assets will normally be the preferred solution. Although decisions will be taken on a case-by-case basis largely determined by practicality and the scale of importance (e.g. national or otherwise) of the heritage asset.

[209] National Planning Policy Framework (NPPF) 2012 section 12, paragraphs 128,129, 130.
[210] National Planning Policy Framework (NPPF) 2012 section 12, paragraph 132.

376. The degree of weight afforded to the content and conclusions drawn by submitted assessments of heritage impact will be determined by their accordance with the most up-to-date good practice advice endorsed by Historic England (HE) and / or the Department for Culture, Media and Sport (DCMS)[211].

377. The MPA will routinely seek local technical advice from the County Council through its archaeological service, and dependant upon the heritage assets affected, may also pursue specialist advice from District Councils, where listed building and conservation areas could be affected.

[211] Historic England has published a suite of Good Practice Advice (GPA) documents for Planning and the Historic Environment. These presently cover: - local planning, managing significance in decision-taking, the setting of heritage assets and enabling development (not yet published). GPA documents are accessible on-line at: - http://historicengland.org.uk/

Landscape

Reasoned justification

378. Gloucestershire is renowned for the diverse and scenic beauty of its landscapes. Over 50% of the county falls under one of three nationally designated Areas of Outstanding Natural Beauty (AONBs)[212]. There are also a number of other non-AONB landscape designations present across the Cotswolds and Forest of Dean and non-designated areas found within the wider countryside that could be considered to be valued landscapes[213]. The National Character Area (NCA) classification identifies 6 distinctive landscape profiles for Gloucestershire – the Herefordshire Lowlands (NCA100), South Herefordshire & Over Severn (NCA104), Forest of Dean & Lower Wye (NCA105), Severn & Avon Vales (NCA106), Cotswolds (NCA107) and Upper Thames Clay Vales (NCA108)[214].

379. Detailed landscape characterisation studies have also been prepared at the countywide and local level throughout Gloucestershire[215]. They have generated numerous local character areas (LCAs). Collectively these studies contribute to a robust local landscape evidence base described as the Gloucestershire Landscape Character Assessment. The studies provide an invaluable baseline for: - determining the presence of very specific characters, features and qualities; identifying potential risks and sensitivities; and highlighting opportunities for possible enhancement.

380. Mineral developments have the potential to impact on local landscapes – through the re-shaping of landforms, removal of features and vegetation and / or the construction of site buildings and structures. However, the significance of such impacts will largely be determined by the site location; relationship to sensitive receptors[216]; nature of working and potential mitigation proposed; the phases of development and their longevity; and the type of landscape affected, its qualities, sensitivity and designation status. Potential opportunities to enhance or reinstate landscape features, particularly through mineral site restoration are also a possible benefit.

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[212] The three AONB designations present in Gloucestershire include: The Cotswolds, Wye Valley and Malvern Hills

[213] There are presently 6 Special Landscape Areas (SLAs) considered within policy 8 of the adopted Cotswold Local Plan (2011) and policy EN1 of the emerging Cotswold Local Plan (2011-2031) For the Forest of Dean, policy CP9 – *Recreation and amenity land* of the adopted Forest of Dean Core Strategy (2012) includes a clause regarding the protection of the landscapes that make up the statutory Forest.

[214] National Character Areas (NCAs) are defined by Natural England (NE). They are an assemblage of unifying features relating to landscape, biodiversity, geodiversity, history, culture and economic activity. Full details of each NCA can be found on-line at: - https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making/national-character-area-profiles#ncas-in-south-west-england

[215] The 'Gloucestershire Landscape Character Assessment' represents the main evidence base covering landscape matters for the county. Further details are available at http://www.gloucestershire.gov.uk/planning-and-environment/ecology-and-landscape/landscape

[216] Sensitive receptors from a landscape perspective will be determined on a case-by-case basis. However, they usually include: - any statutorily and nationally designated landscape areas reasonably likely to be affected; locally designated landscape areas reasonably likely to be affected; statutorily and non-statutorily designated historic assets and features included within the Gloucestershire Historic Landscape Characterisation (HLC) study; commercial premises for which the preservation or enhancement of local landscape character may be business critical; and residential properties.

Policy DM09 | Landscape

Mineral development proposals will be permitted where it can be demonstrated they have been informed by, are sympathetic to, and wherever practicable, will support the enhancement of the character, features and qualities of the landscape character areas or types of the relevant NCAs and LCAs that form the Gloucestershire Landscape Character Assessment.

Part a | Outside of AONB landscape designations (excluding those areas that form part of the setting of an AONB)

Within undesignated valued landscapes or landscape designations other than AONBs unacceptable adverse impacts on the defining character, features and qualities of these areas must be avoided or satisfactorily mitigated.

Part b | AONB designations and other areas that form part of the setting of an AONB

Mineral development proposals within or that affect the setting of the Cotswolds, Wye Valley or Malvern Hills AONBs will only be permitted where it can be demonstrated: -

I. they will not prejudice the conservation of the character, features and qualities of the landscapes and scenic beauty of the AONB and that account will have been given to the conservation of wildlife and cultural heritage;

II. adverse impacts on the special qualities of the AONB as defined by the AONB Management Plan (specifically concerning the environment, landscape and recreational opportunities) will be avoided or satisfactorily mitigated; and

III. opportunities will be taken to support the enhancement of the character, features and qualities of the landscapes and scenic beauty of the AONB as promoted through the relevant AONB Management Plan.

Mineral development proposals within or that affect the setting of the Cotswolds, Wye Valley and Malvern Hills AONBs, that are defined as major development will only be permitted under exceptional circumstances. All of

the relevant criteria set out above in part b must be satisfied. In addition, proposals must be in the public interest by demonstrating: -

I. there is an overriding need to work and / or process the mineral, including national considerations;

II. the local economy will not be subject to unacceptable adverse impacts; and

III. alternative non-AONB sources of mineral supply, which are no more constrained, will not be available on practicality and viability grounds.

Contributes to the delivery of plan objectives 

Interpretation and implementation

381. Policy DM09 seeks to ensure all minerals development proposals are respectful of the intrinsic rural nature of the county. It affords particular attention to the conservation of the special qualities and character that define Gloucestershire's designated landscapes and gives weight to securing possible enhancement opportunities. In line with national policy, valued landscapes both designated and undesignated are afforded proportionate protection[217].

382. In meeting the requirements of policy DM09, mineral development proposals must provide evidence that landscape-related issues have been appropriately analysed. This matter should be dealt with in a holistic manner by reflecting upon any legitimate visual amenity impacts that may arise, as established under requirements of policy DM01. A proportionately detailed Landscape and Visual Impact Assessment (LVIA) must accompany a planning application or be incorporated within a supporting Environmental Statement. All LVIAs should be based on established industry standards and follow the most-up-to date technical guidance for assessing landscape and visual impact[218]. Key to the assessment of landscape impacts is the identification of possible effects and a measure of their scale and significance having fully understood the existing, affected landscapes.

[217] National Planning Policy Framework (NPPF) 2012, paragraph 109, bullet point 1.
[218] Currently the most up-to-date technical landscape guidance is contained within the 3rd edition of the Guidelines for Landscape and Visual Impact Assessment (GLVIA3), which was published by the Landscape Institute in April 2013.

383. Where opportunities exist to remove or minimise the severity and significance of possible adverse landscape impacts, these should be effectively accommodated within minerals development proposals. They may amount to mitigation measures such as new or extended screening through the planting of vegetation; the use of undeveloped stand-off areas; and / or the construction of temporary bunds, or the re-profiling of land. Alternatively, or to supplement methods of screening, integration techniques could be employed. These may include the sympathetic use of materials and / or colouring for built structures and the design and positioning of development in part or in its entirety, to better take advantage of natural contours. The acceptability of proposed mitigation will largely depend upon the subsequent residual impact on the key elements of landscape character that influence local distinctiveness and landscape function with regard to the future contribution being made to the connectivity and environmental integrity of the county's multi-functional green infrastructure network. Important matters that will need to be taken into account involve the extent to which there will be minimal disruption during implementation and whether minimal interventions can be achieved. This may involve the skilful integration with existing vegetation and features, the avoidance of introducing alien species, and the careful assimilation of landforms designed for screening.

384. In addition, management regimes to safeguard and promote the future health and / or the sympathetic and desirable expansion of existing natural features, which contribute to an area's landscape characteristics and qualities (e.g. trees, hedgerows and aquatic vegetation within water features) and will positively contribute to the connectivity and environmental integrity of the county's multi-functional green infrastructure network, may be given weight as evidence of possible enhancements. The degree of alignment shown with environmentally-led initiatives that support the aims and objectives of the Gloucestershire Local Nature Partnership may also be afforded increased weight in the decision making process[219].

385. Mineral development proposals within the Cotswolds, Malvern Hills and Wye Valley AONB designations will be subject to rigorous scrutiny as great weight will be afforded to the conservation of AONB landscapes and their scenic beauty. It is also important that wildlife interests and matters of cultural heritage within AONB designations are assessed as these will also be taken into account[220]. Furthermore, those proposals that are situated outside of AONB boundaries, but form part of their setting should be carefully prepared as they will be subjected to the same demanding analysis. This is to

[219] Local information concerning the initiatives supported by the Gloucestershire Local Nature Partnership (G-LNP) can be obtained at: - https://www.gloucestershirenature.org.uk/projects
[220] National Planning Policy Framework (NPPF) 2012, paragraph 115

ensure that the purposes of AONBs are securely protected as promoted in Planning Practice Guidance[221].

386. The special qualities of the AONB designations that fall within Gloucestershire are set out in the respective AONB Management Plans[222]. It will be critical to any supporting landscape evidence that landscape-related impacts resulting from the proposed minerals development can be clearly identified, fully understood and that the ability to show how any potential adverse impacts will be avoided or mitigated to the extent the wider efforts to conserve the landscape and scenic beauty of the AONB, will not be unduly compromised.

387. Evidence of possible enhancements to AONB designations through the delivery of mitigation measures and / or site restoration will be carefully examined. Of key importance will be the degree of alignment and compatibility shown with active or proposed schemes that seek to uphold the purposes of the designation and the delivery of objectives promoted through the relevant AONB Management Plan[223].

388. National policy is clear that there is an overriding presumption against major development within AONB designations except in exceptional circumstances and where the public interest can be demonstrated[224]. However, major development including for minerals, is not predefined for the purposes of scrutinising its acceptability within AONB designations. This is a matter of planning judgement that must be made on a case-by-case basis[225]. Nevertheless, in assessing whether a minerals development is major or not, careful consideration will be given by decision makers to a number of factors. These include the nature and sensitivity of the locality to development in general and the relationship between the proposal and the landscape character, features and qualities that define the scenic beauty, wildlife and cultural heritage of the designation. A decision on the 'major development' status of a proposal will not be based on any initial view that possible adverse impacts after mitigation measures have been taken into account. The extent to which harm could be moderated will only be considered as part of the decision making process.

389. Major developments within AONB designations must undergo an additional level of scrutiny to establish their acceptability. A clear and demonstrable need must be

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[221] Planning Practice Guidance (PPG), Natural Environment Section, Paragraph: 003 Reference ID: 8-003-20140306

[222] Currently the 'special qualities' of the county's AONB designations can found within: -
The Cotswold AONB Mgmt. Plan (2013-18) obtainable at: - https://www.cotswoldsaonb.org.uk/planning/cotswolds-aonb-management-plan/; the Wye Valley AONB Mgmt. Plan (2009-14) obtainable at: - https://www.wyevalleyaonb.org.uk/caring-for-wye-valley-aonb/management-plans/; and the Malvern Hills AONB Mgmt. Plan (2014- 19) obtainable at: - https://www.malvernhillsaonb.org.uk/managing-the-aonb/management-plan/

[223] Planning Practice Guidance (PPG), Natural Environment section, Paragraph: 004 Reference ID: 8-004-20140306

[224] National Planning Policy Framework (NPPF) 2012, paragraph 116

[225] See the Maurici (July 2014) (Landmark Chambers) legal opinion in respect of the interpretation of the National Planning Policy Framework (NPPF) with regard to 'major development' and the South Downs National Park. It is strongly advised not to simply apply the definition of 'major development' as set out in procedural orders for the purposes of NPPF 2012, paragraph 116.

shown for the working and / or processing of the mineral present at the site and / or the processing of any imported minerals. Information provided to satisfy the requirements of policies MW01, MA02, MW02, MW03 or MW06 may be applicable in this instance.

390. In addition, evidence concerning the potential impact of major development upon the economic well-being of the local economy must be submitted. The scale and significance of possible attributable risks to the future economic performance of other local industries that are either reliant upon the special qualities of the AONB designation (e.g. tourism) or which contribute to the delivery of the objectives of the AONB Management Plan must be provided. Employment opportunities from major development, which support or sustain local skilled labour, particularly traditional quarrying-related skills, may be considered a benefit. Appropriate provision for local apprenticeships secured either by way of a planning condition or a planning obligation could prove to be materially significant.

391. A robust comparative analysis must also be undertaken with major mineral developments to show that non-AONB sources of the type of mineral proposed to be worked and / or processed will not be appropriate. Careful consideration will be given to evidence concerning the present and forecast future availability of non-AONB mineral supplies and its suitability to meet the same technical specifications. Before any judgement can be made, information must be submitted to establish the size and scale of the pattern of mineral supplies that could be affected; whether productive capacity issues might arise with non-AONB supplies; and a robust explanation of any other possible supply challenges, including matters of sustainability that might emerge from having to rely upon alternative non-AONB sources. The fact that minerals can only be worked where they occur and that their distribution is therefore limited will be a defining factor in determining whether a comparative analysis is necessary. Furthermore, the importance of the mineral to be worked in meeting local, sub-national and national needs will be an important matter that will be taken into account by decision makers. At the earliest possible opportunity and ideally at the initial pre-application stage, advice should be sought from the MPA regarding the preparation of a comparative analysis of potential, alternative non-AONB mineral supplies.

Gloucester – Cheltenham Green Belt

Reasoned justification

392. The Gloucester-Cheltenham Green Belt designation was incorporated into the County of Gloucestershire Development Plan 1st Quinquennial Review published in 1960. Its main aim, which remains valid today, was to preserve the open character of land between the two settlements of Cheltenham and Gloucester and prevent them from merging. The countywide Structure Plan adopted in 1981, extended the designation northwards of Cheltenham to avoid coalescence between Cheltenham and the expanding settlement of Bishop's Cleeve. The adopted Gloucester-Cheltenham-Tewkesbury Joint Core Strategy (GCT-JCS), which was adopted in 2017, sets out the current boundary of the Gloucester-Cheltenham Green Belt[226].

393. Mineral Safeguarding Areas (MSAs) exist across parts of the Gloucester-Cheltenham Green Belt that identify sand and gravel and clay resources[227]. In the past relatively small-scale mineral working has taken place in the Green Belt, which has made a modest contribution to steady and adequate supplies of aggregate minerals and the landbank of permitted reserves[228]. Whilst, no plan allocations presently exist within the designation, future mineral developments could arise such as windfall sites resulting from mineral sterilisation mitigation or to provide a localised mineral supply for a specific development project or projects.

394. Very careful consideration will need to be given to the acceptableness of mineral development proposals within Gloucester-Cheltenham Green Belt taking into account the overarching aim of the designation.

[226] The Adopted Gloucester-Cheltenham-Tewkesbury Joint Core Strategy (GCT-JCS) 2017 proposes significant changes to the Gloucester-Cheltenham Green Belt equal to around 16% of designation's coverage prior to the plan's adoption being removed. Full details can be obtained at: - https://jointcorestrategy.org/home'

[227] The extent of MSAs covering the Gloucester-Cheltenham Green Belt can be established using the Minerals Local Plan for Gloucestershire (2018-2032) Policies Map, which can be found at: http://www.gloucestershire.gov.uk/planning-and-environment/planning-policy/adopted-minerals-and-waste-local-plans/adopted-policies-proposals-map/

[228] The Gloucestershire Annual Monitoring Report (AMR) 2004/2005 indicates that 8.40ha of land within the Gloucester-Cheltenham Green Belt was subject to minerals development proposals

Policy DM10 | Gloucester–Cheltenham Green Belt

Part a | Mineral extraction within the Green Belt

Mineral development proposals for extraction within the Gloucester-Cheltenham Green Belt and will be permitted where it can be demonstrated: -

I. the openness of the designation will be preserved; and

II. there will be no conflict with the purposes of including land in the Green Belt.

Mineral development proposals for extraction within the Gloucester-Cheltenham Green Belt that will reduce the openness of the designation and will cause conflict with the purposes of including land in the Green Belt, will only be permitted under very special circumstances, where it can be demonstrated that the totality of the harm to the Green Belt and any other harm will be outweighed by other planning considerations.

Part b | Other mineral developments within the Green Belt

Mineral development proposals other than for extraction will be inappropriate development within the Gloucester-Cheltenham Green Belt and will only be permitted under very special circumstances, where it can be demonstrated the totality of the harm to the Green Belt and any other harm will be outweighed by other planning considerations.

Contributes to the delivery of plan objective

Interpretation and implementation

395. National policy maintains a longstanding position on the aim and function of Green Belt designations[229]. It specifically states they are required to prevent urban sprawl and to keep land permanently open. It also sets out five purposes for the designation : -

- To check the unrestricted sprawl of large built-up areas;
- To prevent neighbouring towns merging into one another;

[229] National Planning Policy Framework (NPPF) 2012 section 9, paragraph 79.

- To assist in safeguarding the countryside from encroachment;
- To preserve the setting and special character of historic towns; and
- To assist in urban regeneration, by encouraging the recycling of derelict and other urban land[230]

396. National policy also makes provision for mineral extraction to be allowed to take place in principle within the Green Belt where openness is preserved and no conflict will occur with purposes of the designation[231]. Evidence that considers both anticipated visual impacts and spatial effects of mineral extraction on the openness of the Green Belt will be required by decision makers. However, all other types of mineral development such as ancillary added value plant e.g. ready mix plant, block-making etc. must demonstrate very special circumstances exist before they are able to proceed. National policy confirms such proposals will be inappropriate, and by definition harmful to Green Belt designations[232].

397. All mineral development proposals will need to be considered on their individual merits. However, where it is necessary to demonstrate 'very special circumstances', the importance of the mineral to be worked with respect to maintaining steady and adequate supplies from Gloucestershire; the availability of resources from outside of the Green Belt; and / or the size, scale and timescales being considered for development will be critical matters in the decision making process.

[230] National Planning Policy Framework (NPPF) 2012 section 9, paragraph 80.
[231] National Planning Policy Framework (NPPF) 2012 section 9, paragraph 90.
[232] National Planning Policy Framework (NPPF) 2012, section 9, paragraph 87.

Aerodrome safeguarding and aviation safety

Reasoned justification

398. Gloucestershire contains civil and military aerodromes including Gloucestershire Airport located at Staverton, Cotswold Airport near Cirencester and RAF Fairford found within the Cotswold Water Park. Mineral resources of potential economic interest are located nearby to all facilities.

399. At RAF Fairford, in particular, significant and extensive amounts of sand and gravel are known to exist. Large areas of land surrounding the military aerodrome have already been worked and proposals for this to continue into the future may come forward. These local sand and gravel resources are considered to be of strategic significance, but so are the county's aerodromes.

Policy DM11 | Aerodrome safeguarding and aviation safety

Mineral development proposals will be permitted only where it can be demonstrated that unacceptable adverse impacts on aviation safety can be avoided or satisfactorily mitigated.

Contributes to the delivery of plan objective

Interpretation and implementation

400. Town and Country Planning (safeguarded aerodromes, technical sites and military explosives storage areas) direction 2002 sets out the government approach for dealing with this matter[233]. The direction seeks to ensure the operation and development of aerodromes will not be inhibited. It states that buildings, structures, erections or works that could infringe upon protected surfaces, obscure runway approach lights or have the potential to impair the performance of aerodrome navigation aids, radio aids or telecommunication systems must be avoided. It also advises against artificial lighting that may distract pilots and the prevention of bird hazard resulting from the introduction of and / or increase in birds. This latter issue is of particular relevance to mineral developments that incorporate the restoration of worked out mineral sites.

[233] Circular 01/03: Safeguarding aerodromes, technical sites and military explosives storage areas contains within Annex 1 the full content of Town and Country Planning (Safeguarding Aerodromes, Technical Sites and Military Explosives Storage Areas) Direction 2002. It can be obtained online at: - https://www.gov.uk/government/publications/safeguarding-aerodromes-technical-sites-and-military-explosives-storage-areas

401. Mineral developments located within 13km of officially safeguarded civil and military aerodromes and / or within any delineated safeguard areas for sites used by the National Air Traffic Control Service (NATS) (known as 'NATS' Technical Sites), will need to undergo consultation with the owner or operator of each facility affected. Specifically in the case of military facilities, the Secretary of State for Defence must be consulted. Representations made by these parties will be carefully considered against the provisions of the government's direction.

402. Several certified aviation safeguarding maps have been published that cover parts of Gloucestershire[234]. These include safeguarding areas for RAF Brize Norton in Oxfordshire that extend into part of Gloucestershire. Safeguarding consultation areas have also been included on the plan's policies map.

403. All mineral development proposals will need to consider their significance in terms of aerodrome safeguarding and aviation safety. For those proposals that fall within allocated areas contained within the plan, location-specific matters are provided where relevant under the detailed development requirements of section 9 of the plan.

404. For mineral development proposals outside of allocated areas, but within aviation-related safeguarding areas, detailed information concerning how the operations of aerodromes and related facilities will not be adversely impacted will be necessary. This must address all phases of minerals development including restoration and aftercare. Where mitigation is considered necessary, its feasibility and practical implementation will be carefully scrutinised during the decision making process.

[234] All aviation safeguarding maps issued to local planning authorities, including MPAs for consultation notification purposes must be certified by either the Civil Aviation Authority (CAA) or the Secretary of State for Defence.

11
MINERAL RESTORATION

Section 11 | Mineral Restoration

Restoration, aftercare and facilitating beneficial after-uses

Reasoned justification

405. The working of minerals is a temporary land use. Once mineral resources have been exhausted and / or the working of a site has permanently ceased it should be possible to re-use the land that has been affected or return it to its original use through a process of restoration.

406. All mineral workings should be accompanied by a credible and achievable scheme of site restoration that is successfully delivered, irrespective of the site characteristics, environment in which it is located, scale and longevity of site activities. No minerals development can claim to have successfully dealt with adverse impacts that it may generate on natural and built environments and local communities without satisfactorily addressing this matter.

407. Successful restoration is also vital in achieving sustainable development. The manner in which disturbed land is managed will dictate whether a satisfactory return to a previous status is either attainable, desirable or whether opportunities exist to bring about enhancements. This could include improvements to biodiversity and the health of the natural environment; the establishment of new or reinforced measures to increase resilience and / or the ability to successfully adapt to climate change; the strengthening, expansion or upgrading of public facilities accessible to those impacted by mineral working and the wider community; and support for the delivery of important items of infrastructure aimed at improving quality of life, well-being and economic performance.

Policy MR01 | Restoration, aftercare and facilitating beneficial after-uses

Mineral development proposals will be permitted where it can be demonstrated high quality restoration and aftercare will: -

I. take place at the earliest opportunity and without generating unacceptable adverse impacts; and

II. be delivered to a high environmental standard; and

III. facilitate beneficial after-uses that will contribute to the delivery of sustainable development.

Contributes to the delivery of plan objectives 

Interpretation and implementation

408. Mineral restoration is the process of returning land following mineral extraction to an acceptable condition, whether for resumption of the former land use or for a new use. Aftercare is the collective term given to the steps taken to maintain land at a necessary standard to facilitate beneficial after-uses. A statutory period of 5 years exists for requiring the implementation and monitoring of the delivery of aftercare activities[235]. However, a longer period may be justified to ensure that a minerals development proposal will be acceptable in planning terms.

409. All mineral development proposals should give due consideration to site restoration, aftercare and facilitating the delivery of beneficial after-uses. This includes proposals for minor additions and variations to existing permitted operations, new / or intensified ancillary minerals development, as well as more substantial extensions to existing quarries or brand new mineral workings.

410. National policy encourages the planning for site restoration and aftercare to be undertaken at the earliest opportunity[236]. As advised in planning practice guidance, it is also a key element of the application process and should be considered at the pre-application stage[237].

411. Provision for site restoration and aftercare will be heavily dependent upon the nature of the minerals development under consideration and site-specific circumstances present at the time. Where restoration and aftercare proposals of permitted mineral workings need to be revised, careful consideration must be given to any potential adverse impacts on the envisaged, final environmental status of the site once it has been restored. In all cases the possibility of environmental degradation must be avoided. If revised restoration aims to deliver enhancement opportunities, these must be clearly identified in the supporting evidence. For more substantial mineral development proposals or those involving a fundamental change to an existing restoration and aftercare scheme a detailed revised restoration strategy will be required.

412. Planning practice guidance advises on the level of detail expected for the restoration and aftercare of mineral developments. Information requirements will ultimately be determined on a case-by-case basis having taken into account the envisaged duration

[235] Part 1, Schedule 5 of the Town & Country Planning Act (1990) sets out the powers for imposing aftercare conditions on minerals planning developments
[236] National Planning Policy Framework (NPPF) 2012, section 13, paragraph 143, bullet point 8.
[237] Planning Practice Guidance (PPG), Minerals Section, paragraph 39, Reference ID: 27-039-20140306.

of proposed operations. However, an overall restoration strategy should be submitted along with evidence it is practically achievable[238]. Matters that will require some consideration include: -

- the identification of the intended after-use and how this will be delivered;
- a good understanding of the existing soil resources including the presence of BMVAL and how these assets might be protected during the working phases and then secured over the long-term (see the requirements for policy DM07);
- the preparation of a hydrological review covering the site and surrounding areas that could be affected (see also the requirements of policies DM04 and DM05); and
- the creation of a landscape strategy, which should form an integral part of a wider Landscape and Visual Impact Assessment (LVIA) initially focused on the consideration of landscape and visual impacts during the working phases of mineral developments (see also the requirements of policies DM01 and DM09).

413. National policy offers a clear steer concerning the assessment of mineral development proposals including any matters arising from mineral restoration and aftercare schemes[239]. It states that no unacceptable adverse impacts on the natural and historic environment, human health or aviation safety should occur having also considered cumulative effect of multiple impacts from individual sites and / or from a number of sites in a locality. Any unavoidable noise, dust and particle emissions must also be controlled, mitigated or removed at source. The assessment requirements set out in the plan's development management policies may reasonably be applied in the case of policy MR01.

414. The concepts of phased and progressive or rolling restoration are supported in planning practice guidance[240]. They are seen as a possible means of minimising disturbance and adverse impacts associated with the outcomes of working minerals including the exposure of disturbed land and possible additional risks from land instability. If employed appropriately, they could also form part of wider mitigation and enhancement measures aimed at meeting the requirements of a number of other local plan policies. However, the way in which phased and / or progressive restoration is proposed must be supported by evidence to show it will be achieved without generated unacceptable adverse impacts on the amenity of local communities and the environment. High quality and timely restoration and aftercare and the ability to facilitate beneficial after-uses must be the priority.

[238] Planning Practice Guidance (PPG), Minerals Section, paragraph 40, Reference ID: 27-040-20140306.
[239] National Planning Policy Framework (NPPF) 2012, paragraph 144.
[240] Planning Practice Guidance (PPG), Minerals Section, paragraphs 40 and 42, Reference IDs: 27-040-20140306 and 27-042-20140306

415. Mineral development proposals expected to take place over the long term should be subject to a review from time to time of their accompanying restoration and aftercare strategies. This is to make sure they remain up-to-date, relevant, and deliverable. It may also help in responding to changes in circumstance particularly where possible enhancements could be affected. Locally-agreed restoration and aftercare strategy reviews may be considered necessary by the MPA as part of the mitigation measures with individual mineral development proposals. Although they are more likely to be requested in sensitive locations. The use of a Section 106 Legal Agreement may be needed to ensure their effective implementation[241].

416. Contributing to the delivery of sustainable development through facilitating beneficial after uses is a key requirement of policy MR01. All mineral restoration and aftercare plans should adopt a holistic approach and include information as to how beneficial after uses may be supported.

417. In line with national policy, high quality mineral restoration and aftercare should support environmentally-related after uses[242]. It should also help bring about environmental enhancements. National policy highlights the potential of the planning system to deliver environmental betterment through land reclamation[243]. Reclaimed sites may be able to realise biodiversity gains; help to increase resilience to and / or assist in accomplishing effective adaptions to climate change pressures; contribute towards the establishment of coherent ecological networks; and aid in the recovery, expansion or creation of priority habitats. Biodiversity gains through reclamation may also involve the retention of and subsequent management of disturbed land to create and maintain bare ground with nutrient poor soils and / or shallow water. This could prove particularly beneficial for rare and threatened invertebrates[244].

418. Restoration and aftercare plans that highlight the natural environment as an intended beneficiary will be carefully considered and should clearly set out the scale and significance of the envisaged positive contribution. In general, measures that will aid the protection of and / or provide for biodiversity enhancements within Gloucestershire will be supported by the MPA. However, in affording weight to any claimed benefits, evidence must be presented to show linkage to the delivery of local and national biodiversity-related targets[245]. The weight afforded to this matter may be enhanced

[241] The Growth and Infrastructure Act (2013) makes provision for reviews to be carried out by MPAs of minerals development proposals. However, the initial review mechanism has restrictions to no earlier than the 1st 15 year period, or in the case of an 'old' permission, 15 years of the date of the initial review. Any earlier timeframe could be taken forward on a case-by-case basis to ensure a proposal is acceptable in planning terms but would require a legal agreement with the operator to achieve this.
[242] National Planning Policy Framework (NPPF) 2012, paragraph 143, bullet point 8
[243] National Planning Policy Framework (NPPF) 2012, sections 10, 11, paragraphs 99, 109 and 117
[244] Guidance on potential support for rare and threatened invertebrates can be obtained at 'Buglife – Habitats Projects': https://www.buglife.org.uk
[245] As at November 2017, national level biodiversity-related targets are contained within Biodiversity 2020: *A strategy for England's wildlife and ecosystem services*, which can be obtained at: - https://www.gov.uk/government/publications/biodiversity-2020-a-strategy-for-england-s-wildlife-and-

where contributions to landscape-scale biodiversity improvements are shown to be realistically achievable and support the delivery of initiatives linked to Gloucestershire's Nature Improvement Areas (NIAs)[246]. Mineral operators will also be encouraged to participate in Gloucestershire-based projects that form part of the 'Nature After Minerals' (NAM) programme[247].Proposals that support the protection of existing trees and / or the planting of new trees that contribute to the creation of woodland habitats will be afforded some weight particularly where this aligns with the planning duty for trees[248]. However, care must be taken to ensure that support for woodland does not compromise the delivery of local biodiversity priorities or the safeguarding of the key characteristics of valued landscapes.

419. In the event wider benefits of ecosystem services have been brought forward with mineral restoration and aftercare plans, demonstrating that the 'most' ecosystem value will be achieved will be given notable weight. DEFRA's introductory and practice guides to valuing ecosystems services could have a bearing on the assessment of individual applications[249].

420. Other types of enhancement opportunities may be acceptable through high quality mineral restoration. National policy headlines the potential to create and enhance green infrastructure; enhance geological conservation interests; promote community facilities; improve the built environment and better conserved historic assets; and reduce the causes and impacts of flooding[250]. Locally-specific enhancements could also incorporate new or expanded water-storage infrastructure.

421. Restoration and aftercare plans that point to a wider sphere of enhancements will need to provide sufficient supporting evidence concerning: -

- the viability and achievability of the proposed enhancements and the scale and significance of any impacts (positive and negative) that could arise from their delivery; and

ecosystem-services. At the local level the Gloucestershire Local Nature Partnership (G-LNP) Plan provides details of the key local priorities and targets relevant to Gloucestershire. It can be obtained at: - http://gloucestershirenature.org.uk/actionplan/index.php.

[246] Gloucestershire's Nature Improvement Areas (NIAs) are defined localities where landscape-scale conservation, management and sustainable use of the natural environment is directed through natural-environmental related projects supported by the Gloucestershire Local Nature Partnership (G-LNP). These are aimed at bring about benefits to our 'natural capital' (of ecosystems, ecological networks, biodiversity, land, air and water) leading to improved health and well-being for people plus bringing sustainability to businesses. Further details can be obtained at: - http://gloucestershirenature.org.uk/actionplan/index.php.

[247] Nature After Minerals (NAM) is a partnership programme, led by the RSPB and supported by Natural England, the Mineral Products Association and the British Aggregates Association. It looks to promote the strategic opportunities for delivering biodiversity through high quality habitat creation on mineral sites.

[248] The preservation and planning of trees duty is contained within Part 8, Chapter 1, clause 197 of the Town & Country Planning Act (1990) - http://www.legislation.gov.uk/ukpga/1990/8/section/197

[249] Planning Practice Guidance (PPG), Natural Environment Section, paragraph 013 Reference ID: 8-013-20160211.

[250] National Planning Policy Framework (NPPF) 2012, paragraphs 9, 28, 101, 109, 114 and 143.

- the degree of alignment with other strategies that influence the development and future use of land within Gloucestershire.

422. Relevant aspirations of the following plans should be considered: - Gloucestershire's local development plans including neighbourhood plans and their accompanying infrastructure delivery plans[251], AONB Management Plans covering the Cotswolds, Malvern Hills and Wye Valley AONB designations[252]; the Cotswold Water Park Master Plan[253], the Gloucestershire Local Flood Risk Management Strategy (LFRMS)[254] and supporting implementation plans; the Severn and Thames River Basin Management Plans (RBMPs)[255]; and the county's Strategic Green Infrastructure (GI) Framework[256]. In the case of enhancement opportunities involving green infrastructure, weight may be given to facilitating the achievement of the 'Building with Nature' benchmark standard with new development[257]

423. Restoring land to facilitate beneficial after-uses may involve importing materials for backfilling that will achieve advantageous landforms and / or where relevant, assist in the management of slope or land instability matters. National policy and planning practice guidance recognise the potential for remediating unstable land as a means of enhancing the environment and for bringing land back into productive use[258]. This can sometimes be a legacy of poorly managed or restored mineral workings from the past. In certain locations within Gloucestershire, the importation of materials for restoration purposes may prove a defining issue for the deliverability of mineral working. For example; proposals for sand and gravel sites within the Cotswold Water Park (CWP) may require the importation of materials to facilitate restoration back to pre-working or near pre-working ground levels. The alternative option is low-level restoration, which

[251] Local planning (including the assessment of infrastructure requirements) is largely carried out through Gloucestershire's six district authorities: – Cheltenham Borough; Cotswold District; Forest of Dean District; Gloucester City; Stroud District and Tewkesbury Borough. Neighbourhood planning is supported by the relevant district authority, but is instigated by local parish and town councils and where relevant neighbourhood forums.

[252] AONB Management plans set out a vision, objectives and policies for the future management of designated areas. They also guide key bodies in the delivery of their responsibilities for these localities. For Gloucestershire, three AONB designations are present, each with their own AONB Mgmt. plan. These can be obtained at: - http://www.cotswoldsaonb.org.uk/?page=ManagementPlan (for the Cotswolds); http://www.malvernhillsaonb.org.uk/managing-the-aonb/management-plan/ (for the Malvern Hills); and https://www.wyevalleyaonb.org.uk/caring-for-wye-valley-aonb/management-plans/ (for the Wye Valley).

[253] The Cotswold Water Park (CWP) Master Plan – officially entitled the *'Strategic Review and Implementation Plan for the Cotswold Water Park'* was developed by the CWP Joint Committee. It provides a vision and strategic framework for the CWP area for considered use with local delivery plans and strategies. It can be obtained at: - http://www.waterpark.org/resources-documents/.

[254] The Gloucestershire Local Flood Risk Management Strategy (LFRMS) - sets out how the County Council will aim to manage flood risk in partnership across Gloucestershire. It can be obtained at: - http://www.gloucestershire.gov.uk/your-community/emergencies-and-your-safety/flooding-and-drainage/gloucestershire-county-councils-local-flood-risk-management-strategy-lfrms/

[255] RBMPs set out requirements for the protection and improvement of the quality of the water environment. The collection of RBMPs in operation across England including for the Severn and Thames districts can be obtained at: - https://www.gov.uk/government/collections/river-basin-management-plans-2015.

[256] The Strategic GI Framework has been compiled by Gloucestershire Local Nature Partnership. It advises on the protection and delivery of strategic Green Infrastructure alongside the Gloucestershire Nature Map. It can be obtained at: - https://www.gloucestershirenature.org.uk/green-infrastructure-framework

[257] Gloucestershire – 'Building with Nature' benchmark standard can be obtained at: - https://www.gloucestershirewildlifetrust.co.uk/what-we-do/enterprise/building-nature

[258] National Planning Policy Framework (NPPF) 2012, paragraph 109, bullet point 5 and Planning Practice Guidance (PPG), Land Stability Section, paragraph: 001 Reference ID: 45-001-20140306.

often results in water features being created such as lakes, ponds and wetlands, due to the area's high water table. However, restoration of this kind can create conflict with nearby airfield land-uses (i.e. RAF Fairford) that must meet strict bird-strike safeguarding requirements. New or expanded water bodies within parts of the CWP could attract large and / or flocking bird species that in turn might be hazardous to air traffic safety. It may prove advantageous to adopt a holistic approach where this matter arises, with particular attention given to demonstrating how possible challenges to the desirable restoration strategy will be tackled and satisfactorily overcome. Evidence applicable to policy DM11 could prove to be pivotal in the decision making process.

424. Importing materials for restoration purposes must be scrutinised to ensure that any attributable, unacceptable adverse impacts are not created and that high quality standards will prevail. The acceptability of importing materials can only be secured, where sufficient evidence has been submitted regarding how possible risks to the natural environment and local communities from importation-related activities can either be avoided or mitigated so that any residual adverse impacts will be minimised to a satisfactory level. It is important that the timescales for delivering high quality restoration and aftercare will not be subjected to unjustifiable delays.

425. Importing waste[259] for use in mineral restoration may be considered a recovery operation that is acceptable as outlined in paragraph 4.43 of the adopted Gloucestershire Waste Core Strategy[260]. Imported waste suitable for mineral restoration but managed by way of disposal to landfill, might also be justified[261]. For the latter, the relevant criteria contained within adopted Gloucestershire Waste Core Strategy policy WCS 8 (Landfill) (or future replacement) will need to be successfully addressed[262].

426. Planning practice guidance advises that the delivery of plans for mineral restoration and aftercare should be secured through the use of appropriate conditions and in some cases, planning obligations[263]. National policy states that the use of financial guarantees should only be sought in exceptional circumstances[264]. This could include:

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[259] The definition of waste recovery is set out in Article 3(15) of the Waste Framework Directive (Directive 2008/98/EC on waste). The Directive explains that to be termed 'recovery' the waste must serve a useful purpose by replacing other materials that would otherwise be used to fulfil a particular function. The Environment Agency (EA) provides detailed technical guidance on defining waste recovery for permitting purposes (RGN 13). This may act as a guide in determining whether the use of imported waste for mineral restoration purposes represents a 'recovery' or 'disposal' operation. RGN 13: Defining waste recovery – *permanent deposit of waste on land* can be obtained at: - https://www.gov.uk/government/collections/regulatory-guidance-series-environmental-permitting

[260] See page 48 of the adopted Gloucestershire Waste Core Strategy, which can be obtained at: - http://www.gloucestershire.gov.uk/planning-and-environment/planning-policy/gloucestershire-waste-core-strategy/

[261] Planning Practice Guidance (PPG), Minerals Section, paragraph: 045, Reference ID: 27-045-20140306.

[262] Page 68 of the adopted Gloucestershire Waste Core Strategy Policy contains the details for policy WCS8 (Landfill). It can be obtained at: - http://www.gloucestershire.gov.uk/planning-and-environment/planning-policy/gloucestershire-waste-core-strategy/

[263] Planning Practice Guidance (PPG), Minerals Section, paragraph: 041 Reference ID: 27-041-20140306.

[264] National Planning Policy Framework (NPPF) 2012, paragraph 144, bullet point 6.

- large scale and very long-term projects that do not involve progressive restoration for practical reasons; more innovative restoration schemes; and / or where there is a risk of possible financial or technical failure but which is not sufficient to justify refusal of planning permission. Where an operator is able to show membership of and is contributing to an established mutual funding scheme to support mineral restoration, there should be no requirement to use financial guarantees for individual proposals even in exceptional circumstances.