Gloucestershire
COUNTY COUNCIL

Minerals Local Plan for Gloucestershire

2018 - 2032

Addendum to the Supporting Evidence Paper

December 2018

Section 1 | Introduction

1. This addendum to the Supporting Evidence Paper has been produced to accompany the submission of the Publication Minerals Local Plan for Gloucestershire (2018 – 2032). It provides an update position on policy preparation matters in advance of the MLP's examination. The paper is focused on areas of the evidence base discussed during the Publication MLP inspection period of May and July 2018. Ideally the paper should be read in conjunction with the Publication MLP Supporting Evidence Paper (May 2018). Information is presented under the following sections: -

    - **Section 2 |** an explanation of how the MLP has met with the statutory 'climate change' duty set out under section 19 of the Planning and Compulsory Purchase Act 2004 as amended by section 182 of the Planning Act 2008[1];

    - **Section 3 |** a technical assessment of the theoretical impact upon making provision for crushed rock aggregate within Gloucestershire as a consequence of modifying Publication MLP through omitting Allocation 01: Land East of Stowe Hill Quarry;

    - **Section 4 |** a schedule setting out which 'saved' adopted policies of the Gloucestershire Minerals Local Plan (1997 – 2006) MLP will be replaced by the Minerals Local Plan for Gloucestershire (2018 – 2032); and

    - **Section 5 |** a schedule of possible main modifications to the Publication MLP that the MPA deems are likely to be required. The modifications will if necessary, be brought before the appointed inspector for consideration at examination hearing sessions. Where appropriate, they will be formally requested under the provisions of section 20(7C) of the Planning and Compulsory Act 2004

[1] Section 19 of the PCPA 2004 as amended by section 182 of the Planning Act 2008 states; *Development plan documents must (taken as a whole) include policies designed to secure that the development and use of land in the local planning authority's area contribute to the mitigation of, and adaptation to, climate change.'*

Section 2 | does the Publication MLP contribute to the mitigation of, and adaption to, climate change?

2. Responding to the evolving challenges of climate change has been integral to the preparation of the emerging MLP. It was identified as a key area of investigation early on during the plan inception stage and was detailed in a joint technical paper, which supported early public consultation in 2009[2]. The preparation of the plan's Sustainability Appraisal has also ensured tackling climate change has been carefully scrutinised. It has been incorporated as core SA objective questions / tests: - *How flexible or adaptive are sites or facilities (allocations) in terms of a) adapting to Climate Change and b) using new technology to reduce greenhouse gas emissions as it develops*[3]*.*

3. Nevertheless, following the review of representations received to the Publication MLP and consideration of technical advice offered in support of the preparation of the Publication MLP Legal Compliance and Soundness Checklists[4], it is deemed appropriate to provide a further statement on climate change matters.

4. The statement provides an update on significant international agreements post-Kyoto (i.e. Paris 2015) and national policy reforms culminating in the introduction of NPPF (2012) and its recent revision in July 2018. It also offers a clear explanation of the specific climate change-related measures that have been taken forward into the Publication MLP.

International perspective

5. There is an overwhelming scientific consensus regarding climate change. The vast majority of published research also concludes that the emission of greenhouse gases from human activity is a major contributing factor. The impact of climate change is of global significance and will require coordinated action by all nations around the world.

6. In 1992 the United Nations set up an international forum to respond to climate change – the United Nations Framework Convention on Climate Change (UNFCCC) (more commonly known as *"the UN Convention on Climate Change"*). This group, which is currently made up of 195 countries, is focused on negotiating a way forward to tackle climate change across four areas: - mitigating (reducing)

[2] The Joint Technical Evidence Paper WCS-MCS-10 Climate Change | Living Draft (October 2009) can be obtained at: https://www.gloucestershire.gov.uk/media/7206/joint_technical_evidence_paper_wcs-mcs-10_climate_change-33461.pdf

[3] Table 4.1 of the Minerals Local Plan for Gloucestershire (2018-2032): Publication Plan: Sustainability Appraisal including Strategic Environmental Assessment contains the SA objectives and subsidiary questions / test. The SA can be obtained at: - https://www.gloucestershire.gov.uk/media/1520148/mlp-for-glos-2018-2032-publication-plan-sa-full-report.pdf

[4] Local authorities are advised by PINS to produce checklists to help demonstrate how they have assessed the content of their plans against both legal requirements and policy criteria as set out in the National Planning Policy Framework (NPPF). Two such checklists will form part of the documents submitted alongside the Publication MLP to the Secretary of State in December 2018.

greenhouse gas emissions; adapting to the impacts of climate change; consistent reporting on emissions; and financing climate action in developing countries.

7. The overarching aim of the UN Convention on Climate Change has remained unchanged since its inception. It seeks to -

"Achieve… stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure food production is not threatened and to enable economic development to proceed in a sustainable manner."

8. The Kyoto Protocol of 1997 was the first major breakthrough of the UN Convention on Climate Change. It set a target for 37 of the world's industrialised countries to reduce their emissions by an average of 5% below 1990 levels, for the period between 2008 and 2012. A second Kyoto commitment period from 2013 to 2020 was also agreed. Although a much smaller number of nations, including the UK and the other countries of the EU signed up to the additional requirements.

9. The 2015 Paris Agreement is the most recent high-level settlement secured by UN Convention on Climate Change. It is also considered to be the first truly global effort to tackle emissions. To date over 160 countries have pledged to participate in reducing emissions up to 2030. The central aim of the agreement is for actions taken by countries to collectively restrain the increase in global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit warming to 1.5°C. A review pledge is included in the Paris Agreement for 2018 and 2023 and further reviews every five years after that.

UK perspective

10. The UK is a member of the UN Convention on Climate Change. Successive UK governments from Kyoto onwards have pledged to meet international commitments on reducing emissions including most recently under the Paris Agreement. In respect of this, joint work with member states of the European Union has been undertaken. At present an EU-specific agreement is in force, which seeks to achieve a 2030 "pan-European" target of at least a 40% reduction in emissions below 1990 levels.

11. The Climate Change Act 2008 is the legal basis for the UK's approach to tackling and responding to climate change. The Act requires that emissions of carbon dioxide and other greenhouse gases are reduced and that climate change risks are

prepared for. It establishes the overarching national framework to deliver on these requirements.

12. A target of reducing greenhouse gas emissions from the UK by at least 80% of 1990 levels by 2050 is a legal commitment contained within the Climate Change Act. An independent statutory expert assessor to monitor progress on this target has also been established – the Committee on Climate Change (CCC). This assessor must also provide government with advice on evolving climate change risks and progress towards tackling them.

13. In addition the Climate Change Act requires the government to set legally-binding 'carbon budgets' to help move towards the 2050 reduction target. A carbon budget is a cap on the amount of greenhouse gases emitted in the UK over a five-year period. Budgets must be set at least 12 years in advance to allow policy-makers, businesses and individuals enough time to prepare. The CCC provides advice on an appropriate cap for each carbon budget. The most recent carbon budget was set in 2016 for the period covering 2028 to 2032[5].

14. The Infrastructure Act 2015 has created an additional duty on the CCC to advise the UK government on the implications of exploiting onshore petroleum, including shale gas in the context of meeting UK carbon budgets. The CCC provided its first advice on onshore petroleum in 2016[6].

Legislative context specific to planning

15. Section 19 of the Planning and Compulsory Purchase Act 2004 as amended by section 182 of the Planning Act 2008 introduces a plan making duty to ensure development and the use of land in a local planning authority area contributes to the mitigation of and adaption to climate change. This duty is applicable to mineral planning authorities in their consideration of mineral development proposals.

National policy framework for planning

National Planning Policy Framework (2012)

16. The National Planning Policy Framework (NPPF) published in 2012 introduces climate change under the environmental 'role' of planning in delivering sustainable development. It advises that the system should seek to mitigate and adapt to

[5] The Carbon Budget Order 2016 – http://www.legislation.gov.uk/uksi/2016/785/made
[6] The CCC advice on onshore petroleum was published in July 2016 and is entitled; *"Compatibility of onshore petroleum with meeting the UK's carbon budgets"* – https://www.theccc.org.uk/publication/onshore-petroleum-the-compatibility-of-uk-onshore-petroleum-with-meeting-carbon-budgets/

climate change including moving to a low carbon economy[7]. Paragraph 17 of the NPPF also establishes climate change as a core planning principle. It states;

'planning should… support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change, and encourage the reuse of existing resources, including conversion of existing buildings, and encourage the use of renewable resources (for example, by the development of renewable energy)'.

17. Section 10 of the NPPF entitled; *Meeting the challenge of climate change, flooding and coastal change,* affirms the prominence of climate change actions in planning practice. It headlines climate change matters that the planning system has a role in securing. These include: - radical reductions in greenhouse gas emissions; minimising vulnerability; and providing resilience to the impacts of climate change[8]. A specific task for local planning authorities is also presented here – the adoption of proactive strategies to mitigate and adapt to climate change that will take account of flood risk, coast change and water supply and demand considerations, and also the objectives and provisions of the Climate Change Act 2008[9]. This task has the effect of making the duty of an 80% reduction in carbon dioxide emissions by 2050 a fundamental part of a local planning authority's policy considerations in respect of climate change[10]. An additional relatable, requirement is also set out. It is concerned with ensuring local planning authorities support the move to a low carbon future through the planning of new development (covering both location and function) that will achieve reductions in greenhouse gas emissions[11].

18. Longer term the NPPF also expects that local plans will take account of climate change through their approach to the risk of flooding, changes to the coast, management of water resources and effects upon biodiversity and landscape. It states that new development should be planned to avoid increased vulnerability to a range of impacts arising from climate-change. In vulnerable areas, care should be taken to ensure risks can be managed through suitable adaptation measures, including green infrastructure[12].

19. Paragraph 156 of the NPPF confirms that local planning authorities should set out the strategies priorities and policies in their local plans for climate change mitigation and adaptation, amongst other matters.

[7] Paragraph 7, National Planning Policy Framework (2012)
[8] Paragraph 93 National Planning Policy Framework (2012)
[9] Paragraph 94 and footnote 16, National Planning Policy Framework (2012)
[10] Clause 1, Part 1 of the Climate Change Act 2008 states; *'It is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is at least 80% lower than the 1990 baseline.'*
[11] Paragraph 95, National Planning Policy Framework (2012)
[12] Paragraph 99, National Planning Policy Framework (2012)

Revised National Planning Policy Framework (2018)

20. A revised National Planning Policy Framework (rNPPF) was published in July 2018. Whilst the reference locations of key national policy requirements on climate change are changed, its core content and main message remains largely unaffected.

21. Nevertheless, paragraph 148 of the rNPPF, which considers specific climate change measures, establishes support for the transition to a low carbon future as a key function of the planning system. It also makes clear of the need to improve (and not just provide for) resilience.

22. Furthermore, paragraph 149 of the rNPPF introduces a new climate change consideration for plans – the risk of overheating from rising temperatures. It also makes specific policy requirements in respect of support for future resilience to climate change impacts for both communities and infrastructure, through the provision of space for physical protection measures, or the possibility to achieve the relocation of vulnerable development and infrastructure.

Planning Practice Guidance (PPG) 2014

23. Planning Practice Guidance (PPG) was first introduced by the Government in early 2014. It is an online only resource that aims to provide a central hub to expand upon national planning policy set out in the NPPF. An entire category of the PGG is entitled; *'Climate change'*. Information included was last updated in June 2014[13].

24. PPG provides advice in respect of the following matters: - why it is important for planning to consider climate change; how plan's can address its challenges; how adaption and mitigation can be integrated; how to deal with uncertainty over risk; appropriate mitigation measures; supporting energy efficiency; and building sustainability.

25. Climate change mitigation and adaption measures for consideration through local plan making are exemplified within the PPG[14]. They include; reducing the need to travel and providing for sustainable transport; providing opportunities for renewable and low carbon energy technologies; decentralised energy and heating (particularly at a district-level which might facilitate tri-generation[15]); promoting low carbon design; facilitating the creation of multi-functional green infrastructure (where it will contribute to reducing urban heat islands, managing flooding and helping species

[13] The status of the PPC category entitled 'climate change' was correct as of November 2018.
[14] Planning Practice Guidance (PPG) – Climate change category, paragraph: 003; reference ID: 6-003-20140612 and paragraph: 004, reference ID: 6-004-20140612
[15] Tri-generation is term used to describe the production of electricity, heat and cooling in the one process. This may take the form of electricity generation wit h the exhaust heat going to an absorption chiller which produces chilled water and hot water for air conditioning or alternatively the heat used for a swimming pool

adapt to climate change); taking account of climate risks when allocating development; considering (and promoting) design responses to flood risk and coastal change; and considering water resources (in particular the protection of its quality), water infrastructure and the promotion of water efficiency

Responding to climate change in Gloucestershire

26. Whilst climate change is clearly a global challenge it will undoubtedly have significant local implications that in part will require local solutions. For Gloucestershire, published forecasts up to 2080 would suggest that the county is likely to experience much warmer and wetter winters (up by 3^{o}C); hotter and drier summers (up to 5.5^{o}C); more frequency and extreme weather events; and sea and (Severn) estuary level rises in addition to a higher tidal range[16].

27. Gloucestershire County Council has a published strategy in place for responding to climate change, which was released in 2008[17]. Entitled *"Responding to Climate Change"* the strategy is largely focused on climate change-inspired infrastructure actions covering the management of the council's own estate and assets (e.g. energy efficiency in offices and buildings; solar panel installation; electric pool cars etc.) However, it also introduces a broader long-term policy commitment of ensuring climate change will be a key factor in all decision-making. More specifically the strategy aims to encourage a reduction in greenhouse gas emissions from across the county through partnership working to achieve reductions in energy use and an increase in energy efficiency; the promotion of sustainable travel; and also growth in alternative, renewable energy production and subsequent take-up. The County Council's role in the planning system is identified as a means of making progress with the strategy.

Minerals industry and climate change

28. The working, processing and delivering of minerals produces greenhouse gases, the most notable of which is carbon dioxide (CO_2). Recent calculations conclude that CO_2 emissions from the working of crushed rock equate to 3.8kg emitted per tonne. However, where more energy-intensive processing is involved, emission figures increase markedly. For example, cement manufacturing 679kg of CO_2 is emitted for every tonne produced[18]. At the national level, the mineral industry is contributing to the 126mt of greenhouse gas emissions per year attributed to the

[16] Forecasts taken from conclusions published by the South West Climate Change Impacts Partnership SW-CCIP) within the South West Climate Change Action Plan for the South West (2008 – 2010)
[17] Responding to Climate Change: Gloucestershire County Council's Corporate Climate Change Strategy 2008
[18] Figures taken from the Mineral Products Association (MPA) website on Carbon Management (viewed Nov 2018) – https://www.mineralproducts.org/sustainability/carbon-management.html

transport sector and in particular, mineral processing is a key component in the 10.5mt of greenhouse gas emissions arising from industrial activity[19]. In light of the UK's firm commitment to reduce the nation's carbon footprint there is strong case for establishing robust controls to avoid further increases in greenhouse gas emissions and / or to achieve reduction wherever possible.

Planning for minerals in Gloucestershire and addressing climate change

29. The introduction to the emerging Minerals Local Plan for Gloucestershire (2018 – 2032) sets out key motivations for, and influences upon, future mineral working in the county. In relation to climate change an entire theme or 'drivers for change' has been established[20]. A brief explanation is provided alongside the stated driver, which sets out a number of actions. These include: - minimising greenhouse gas emissions particularly from transporting minerals *(mitigation)*; supporting infrastructure to increase resilience to climate change impacts *(indirect adaptation)* and the integration of features to help local environments adapt to climate change *(direct adaptation)*. In addition, other 'drivers for change' for the plan offer complimentary measures such as seeking to reduce the reliance on primary aggregates (through the sustainable use of secondary & recycled aggregate alternatives)[21] *(mitigation)*; and encouraging greater freight efficiency and reduced vehicle numbers [22] *(mitigation)*.

30. The plan's objectives expand upon the drivers for change and provide high-level actions to be articulated through the remainder of the plan. This includes the issue of climate change. Objective SR introduces a preference towards the use of secondary and recycled aggregates where achieved in a sustainable (and viable) manner incorporating matters of transport, handling and processing and environmental impact[23]. This approach is seeking to minimise the activity of mineral extraction justified (in part) on the grounds that alternative materials will offer a smaller carbon foot print. Related to this is objective RM. It requires the optimal use of minerals to be secured, another constraint on the use primary mineral extraction[24]. Furthermore, objective MM which is focused on securing an efficient, effective and safe highway network identifies actions that will result in the curtailment of greenhouse emissions caused by mineral transport[25].

[19] Taken from the Department of Business, Energy and Industrial Strategy statistical release on UK Greenhouse Gas Emissions for 2016
[20] Paragraph 68, page 16, Publication Minerals Local Plan for Gloucestershire (2018 – 2032)
[21] See Driver E | Developing secondary & recycled aggregate supplies under paragraph 72, pages 17-18 of the Publication Minerals Local Plan for Gloucestershire (2018-2032)
[22] See Driver I | Reducing the impact of mineral transport under paragraph 77, page 19 of the Publication Minerals Local Plan for Gloucestershire (2018-2032)
[23] Objective SR | Maximising the use of secondary and recycled aggregates, page 22 of the Publication Minerals Local Plan for Gloucestershire (2018-2032)
[24] Objective RM | Effectively managing mineral resources, page 22 of the Publication Minerals Local Plan for Gloucestershire (2018-2032)
[25] Objective MM | Efficient, effective and safe movement of minerals, page 25 of the Publication Minerals Local Plan for Gloucestershire (2018-2032)

31. Objective PS is concerned with ensuring the supply of minerals will contribute to meeting local and national requirements. In a climate change context the objective has a potential 'enabling' role for ensuring physical adaption measures (i.e. civil engineering) can be delivered[26]. Enabling climate change adaption can also be attributed to elements of objective RA through its provision of relevant land restoration solutions such securing resilience to flooding[27]. In addition, similar provisions could be linked to objective ENV, which includes the consideration of opportunities for landscape and habitat enhancement[28]. A reasonable interpretation of this could involve enhancement through the 'building-in' of environmental resilience to the impacts of climate change.

32. The detailed local policy framework set out in the remainder of the Minerals Local Plan for Gloucestershire sets out numerous requirements that can be linked back to the delivery of the plan's objectives, including the provisions concerned with tackling climate change. Table 1 below identifies mineral policies and their associated requirements that contain climate change-relatable actions. It also shows their relevance and envisaged contribution to mitigating and / or adapting to climate change. It is however, important to note that other mineral policies contained in the Publication MLP are likely to contribute to either mitigation and / adaption to climate change

[26] Objective PS | Making provision for the supply of minerals, page 23 of the Publication Minerals Local Plan for Gloucestershire (2018 – 2032)
[27] Objective RA | Successfully restoring worked-out mineral sites, page 24 of the Publication Minerals Local Plan for Gloucestershire (2018-2032)
[28] Objective ENV | Protecting the built and natural environment, page 23 of the Publication Minerals Local Plan for Gloucestershire (2018- 2032)

Table 1: Publication MLP policies and their contribution to mitigating and / or adapting to climate change

Policy contained in the Minerals Local Plan for Gloucestershire (2018-2032)	Policy provisions / requirements linked to delivery of climate change actions	Envisaged contribution to climate change mitigation and / or adaptation
SR01 | Maximising the use of secondary and recycled aggregates	To maximise the use of secondary and recycled aggregates (including building products made from these materials) in non-minerals development	**Climate change mitigation:** • Contributing to the reduction in greenhouse gas emissions from minerals by way actively supporting alternatives to more 'carbon-intensive' primary mineral working and / or processing.
MS02 | Safeguarding mineral infrastructure	To safeguard existing mineral infrastructure sites and their operating capacity (particularly for the handling and / or processing and distributing recycled and secondary aggregates) from incompatible, non-minerals development	**Climate change mitigation:** • Contributing to the reduction in greenhouse gas emissions from minerals by way facilitating the opportunity to access alternatives to more 'carbon-intensive' primary mineral working or processing. • Contributing to the reduction in greenhouse gas emissions from minerals by way of ensuring a local option is maintained or made available that would minimise the amount of freight transport required.
MW02 | Natural building stone	To ensure that alternative more sustainable supplies of natural building stone are investigated Evidence that transport-related greenhouse gas emissions will not increase is also advised	**Climate change mitigation:** • Contributing to the reduction in greenhouse gas emissions from minerals by way of curtailing unjustified 'carbon-intensive' primary mineral working or processing • Contributing to the reduction in greenhouse gas emissions from minerals by way of ensuring a local supply option is maintained or is made available that would minimise the amount of freight transport required.

MW03 | Clay for civil engineering purposes	To ensure that alternative more sustainable supplies of clay for civil engineering purposes are investigated Evidence of support for local civil engineering projects is also advised	**Climate change mitigation:** • Contributing to the reduction in greenhouse gas emissions by way of curtailing unjustified 'carbon-intensive' primary mineral working or processing • Contributing to the reduction in greenhouse gas emissions from minerals by way of ensuring a local supply option is maintained or is made available that would minimise the amount of freight transport required. **Climate change adaptation:** • Supporting civil engineering projects aimed at delivering protection against climate change impacts (e.g. flood defence schemes)
MW05 | Coal	To ensure that coal working is only allowed under certain very limited circumstances Evidence of reducing greenhouse gas emissions resulting from energy generation (through transport)is also advised.	**Climate change mitigation:** • Contributing to the reduction in greenhouse gas emissions from minerals by way of curtailing unjustified 'carbon-intensive' primary mineral working or processing • Contributing to the reduction in greenhouse gas emissions from minerals by way of ensuring a local supply option is made is available that would minimise the amount of freight transport required.
MW06 | Ancillary minerals development	To ensure that ancillary processing of worked minerals is justified, particularly if raw, primary minerals were to be imported. Evidence that transport-related greenhouse gas emissions will not increase is also advised	**Climate change mitigation:** • Contributing to the reduction in greenhouse gas emissions from minerals by way of curtailing unjustified 'carbon-intensive' primary mineral processing • Contributing to the reduction in greenhouse gas emissions from minerals by way of ensuring a local supply option is made available that would minimise the amount of freight transport required.

MA01 | Aggregate working within allocations and the Detailed Development Requirements schedules contained in Appendix 4	To ensure that the following site-specific criteria are met before allowing aggregate working to take place: - Evidence to show that anticipated climate change impacts affecting flood risk will be investigated and necessary solutions will be provided for. Evidence to show that in preparing for mineral restoration anticipated climate change impacts will be taken into account and environmental resilience measures will be incorporated. That opportunity to facilitate habitat shifts resulting from climate-change displacement will be investigated.	**Climate change adaptation:** • Improving the knowledge base of potential flood risk impacts resulting from climate change • Contributing to reducing both the occurrence and severity of adverse flooding impacts linked to climate change • Facilitating the development of or improvements to built or natural infrastructure that will assist in reducing the risk of adverse climate change impacts
MA02 | Aggregate working outside of allocations	To ensure that opportunities to achieve climate change-related benefits through restoration are taken into account.	**Climate change adaptation:** • Facilitating the development of or improvements to built or natural infrastructure that will assist in reducing the risk of adverse climate change impacts
DM03 | Transport	To encourage alternatives modes of non-road transport for the movement of minerals	**Climate change mitigation:** • Contributing to the reduction in greenhouse gas emissions from minerals by way supporting the use of less 'carbon intensive' modes of transport
DM04 | Flood risk	To ensure that mineral developments will not increase the risk of flooding now and in the future as a consequence of climate change	**Climate change adaptation:** • Improving the knowledge base of potential flood risk impacts resulting from climate change • Contributing to reducing both the occurrence and severity of adverse flooding impacts linked to climate change

DM05 | Water resources	To ensure that the efficient use of water is taken into account and that appropriate measures are adopted	**Climate change adaptation:** • Contributing to reducing both the occurrence and severity of adverse water resource impacts linked to climate change (e.g. periods of drought)
MR01 | Restoration, aftercare and facilitating beneficial after-uses	To ensure that the restoration of mineral developments will facilitate the delivery of beneficial after-uses and will contribute to sustainable development, which includes taking account of climate change and the opportunity to adapt to its impacts.	**Climate change adaptation:** • Facilitating the development of or improvements to built or natural infrastructure that will assist in reducing the risk of adverse climate change impacts

Section 3 | making provision for crushed rock aggregates within Gloucestershire | the possible consequences of omitting Publication MLP Allocation 01: Land East of Stowe Hill Quarry

34. The Publication MLP contains five allocations for the future working of crushed rock aggregate that are considered necessary to support the continued steady and adequate supply of minerals from Gloucestershire. The supporting evidence paper to the Publication MLP (sections 3-4) explains in some detail what the provision requirements are for the plan and the approach taken to facilitate the delivery of these requirements – the justification for the five crushed rock aggregate allocations.

Review and response to representations made to the Publication MLP

35. The Publication MLP was made available for public inspection between May and July 2018. This exercise resulted in representations from key specific consultees, namely the Environment Agency (EA) and Natural England (NE)[29]. Both organisations put forward objections to the plan. The acceptability of Allocation 01: Land east of Stowe Hill Quarry was central to the representations. The risk of mineral working negatively impacting upon the key features of the nearby Slade Brook Site of Special Scientific Interest (SSSI) was cited as the overriding concern[30].

36. Allocation 01 and the Slade Brook SSSI have well-documented hydrological links. However in the view of both the EA and NE, ongoing monitoring of the local hydrological system incorporating existing mineral working at the Stowe Hill and Clearwell quarry complex has yet to demonstrate sufficient evidence to ascertain whether future additional working in this locality is able to avoid impacting upon the condition of the SSSI

37. The representations made to the Publication MLP by the EA and NE closely align with recent made comments to an ongoing, undetermined planning application for crushed rock aggregate working over part of Allocation 01[31]. The County Council is also in receipt of another undetermined planning application for crushed rock

[29] For full details see the Submission MLP (2018 – 2032) Copies of Representations made in accordance with Regulation 20 documents and in particular the representations 1169920/1/MA01/USND; 1169920/6/AL01/USND; 1116790/2/MA01/USND and 1116790/3/AL01/USND
[30] The Slade Brook SSSI Citation can be viewed in full at:- https://designatedsites.naturalengland.org.uk/PDFsForWeb/Citation/2000473.pdf
[31] For more details see GCC Planning application reference: 17/0122/FDMAJM | Extension of Stowe Hill Quarry & Retention of mineral processing plant at Clearwell Quarry.

aggregate working over a larger area that was submitted in 2015. The larger application is very similar to the allocation[32].

38. At the time of finalising this addendum supporting evidence paper and submitting the Publication MLP to the Secretary of State, both planning applications for additional crushed rock working at Stowe Hill remain unresolved. Specifically in the case of the more recent, smaller planning application, there is ongoing dialogue between the applicant (and principal supporter of Allocation 01), the EA, NE and the MPA. The content of this supporting evidence paper and other related documents have been prepared without prejudice to the outcome of the development management process. Indeed any change in circumstances with the unresolved planning applications will need to be reported during the examination process, possibly at hearing sessions..

39. Between September and November 2018 policy officers of the MPA have worked with the EA and NE to establish a clear understanding of key issues arising from their representations to the MLP. Consideration has also been given to a potential way forward with the Publication MLP. This has culminated in the preparation of Statements of Common Ground (SoCGs) between the County Council and each of the consultees[33]. These documents are included as part of the evidence base to accompany the submission of the Publication MLP to the Secretary of State in December 2018.

40. The SoCGs identify a possible modification to the Publication MLP. This would see the entire Allocation 01 being omitted from the plan. The merits or demerits of the allocation could prove to be an important matter requiring debate at examination hearing sessions for the Publication MLP. Consequently, the SoCGs offer a potential way forward jointly prepared by the MPA and the two key statutory bodies.

41. The omission of Allocation 01 will undoubtedly have implications for the MLP in terms of its ability to demonstrate deliverability of crushed rock aggregate supplies over the plan period. The remainder of this section explores and assess the possible impacts that might emerge and how they could relate to future crushed aggregate provision.

[32] For more details see GCC Planning application reference: 15/0108/FDMAJM | Extension of Stowe Hill Quarry, the phased relocation of the mineral processing plant from Clearwell Quarry to Stowe Hill Quarry including a coating and replacement concrete plants and a road access onto the B4228, increase in the maximum output of material leaving Stowe Hill Quarry and revised restoration of Clearwell Quarry.

[33] Both Statements of Common Ground (SoCGs) can be viewed on the GCC website at:- https://www.gloucestershire.gov.uk/planning-and-environment/planning-policy/minerals-local-plan-for-gloucestershire/evidence-base-for-the-minerals-local-plan-for-gloucestershire/

Provision requirements for crushed rock | established position as set out in the Publication MLP

42. Table 4 (page 18) of the supporting evidence paper to the Publication MLP establishes the overall amount of crushed rock provision for consideration by the plan. It is equal to 13.432 million tonnes (mt)[34]. This total assumes 24.32 mt of existing permitted reserves will contribute to aggregate supplies over the plan period.

43. Paragraphs 30 to 41 (pages 18 to 20) and tables 5 (page 20) and 6 (page 21) of the supporting evidence paper explain the method for making provision for crushed rock aggregate within the plan. Account is given to a number of key local circumstances (e.g. the existence of distinct resource areas with different established patterns of supply, distinct market areas and aggregate end-uses). Future demand for crushed rock is also based on rolling forward the projection of the 10-year average annual sales. This is taken from the Local Aggregate Assessment (LAA) and is known as the LAA rate[35].

44. Table 5 (page 20) of the supporting evidence paper establishes a theoretical countywide demand figure of 1.452 million tonnes per annum (mtpa). This is further divided between the county's two distinct resource areas – 1.0164 mtpa for the Forest of Dean and 0.4356 mtpa for the Cotswolds. Also provided is a potential provision requirement to maintain reserves at a desirable level, equal to 10.4164mt and 3.0156mt respectively from the Forest of Dean and Cotswold resources areas (Table 6, page 21 of the supporting evidence paper).

45. Section 4 (pages 27 to 31) of the supporting evidence paper outlines the approach taken to facilitating the delivery of crushed rock aggregate requirements by way of plan allocations. Table 11 (page 29) introduces the allocations put forward in the Publication MLP and their potential yields and maximum productive capacities (based primarily on the assumption of the continued operating practices of existing mineral workings). Tables 2a and 2b below re-presents information from table 11, specifically in relation to crushed rock aggregate[36].

[34] The Supporting Evidence Paper to the Publication MLP (May 2018) can be obtained at: - https://www.gloucestershire.gov.uk/planning-and-environment/planning-policy/minerals-local-plan-for-gloucestershire/evidence-base-for-the-minerals-local-plan-for-gloucestershire/

[35] More details of the approach to projected future local demand for crushed rock aggregate can be found in the 6th Local Aggregate Assessment which can be obtained at: - https://www.gloucestershire.gov.uk/planning-and-environment/planning-policy/local-aggregates-assessment-laa/

[36] A key revision has been made to Table 11. The productive capacity at Stowfield Quarry has been increased to a total of 1.2 million tonnes per annum. This was previously reported to be 0.8 mtpa. The reason for this change is to acknowledge that a trigger within the S.106 legal agreement covering mineral working at Stowfield Quarry was reached in 2017.

Table 2a: Publication MLP allocations for crushed rock from the Forest of Dean resource area and their potential yields and contribution towards Gloucestershire's aggregate supply

Publication MLP Allocation	Aggregate mineral / resource area	Potential total yield (in million tonnes - mt)	Maximum productive capacity (in million tonnes per annum - mtpa)
Allocation 01: Land east of Stowe Hill Quarry	Crushed rock limestone / Forest of Dean	Between 10 and 17mt	0.6 mpta
Allocation 02:Land west of Drybrook Quarry	Crushed rock limestone / Forest of Dean	Less than 4mt	0.25 mpta
Allocation 03: Depth extension to Stowfield Quarry	Crushed rock limestone / Forest of Dean	7.4mt	1.2 mpta[37]
Potential total yield from the allocations of the Forest of Dean resource area			**Between 21.4 and 28.4mt**
Maximum productive capacity from the allocations of the Forest of Dean resource area			**2.05 mtpa**

[37] A legal agreement is in place at Stowfield Quarry under planning reference: 09/0013/FDMAJM. This agreement allows for a maximum capacity of 1.2million tonnes per annum following several triggers being reached from a starting capacity of 800,000 tpa. The final trigger was reached in 2017.

Table 2b: Publication MLP allocations for crushed rock from the Cotswolds resource area and their potential yields and contribution towards Gloucestershire's aggregate supply

Publication MLP Allocation	Aggregate mineral / resource area	Potential total yield (in million tonnes - mt)	Maximum productive capacity (in million tonnes per annum - mtpa)
Allocation 04: Land north west of Daglingworth Quarry	Crushed rock limestone / Cotswold	Around 9mt	0.25 mtpa
Allocation 05:Land south and west of Naunton Quarry	Crushed rock limestone / Cotswold	Up to 10mt	0.5 mtpa
Potential total yield from the allocations of the Cotswolds resource area			**Around 19mt**
Maximum productive capacity from the allocations of the Cotswolds resource area			**0.75mtpa**

The impact on facilitating the delivery of aggregate requirements assuming the omission of Allocation 01: Land east of Stowe Hill Quarry from the Publication MLP

Impact on potential yields and productive capacity

46. The omission of Allocation 01 will have an impact on potential yields to replenish exhausted local reserves. It will also affect productive capacity of local crushed rock supplies. The loss of Allocation 01 would reduce the Forest of Dean resource area's potential yield to no more 11.4 million tonnes. The maximum productive capacity would also fall to 1.45 mtpa. This maximum productive capacity figure for the Forest of Dean resource area excluding Stowe Hill Quarry differs from that which could be calculated from table 11 of the supporting evidence paper. The reason is due to a revision to the maximum capacity at Stowfield Quarry, which is explained in the footnote table 2a of this paper.

47. Removing Allocation 01 from the MLP would not create a theoretical shortfall for future supplies when applying the basic LAA rate. It would still be possible for crushed rock aggregate working within the Forest of Dean resource area to meet demand annually as set out in the Publication MLP (i.e. 1.0164 mtpa). The amount of yield needed to replenish exhausted reserves (10.4164mt) could also be achieved.

48. However, without Allocation 01 local flexibly in the future aggregate supplies would be reduced. It would create very little headroom to accommodate fluctuations in supply such as those modelled in the supporting evidence paper (Table 12, page 30).

49. Furthermore, it is assumed that both Drybrook and Stowfield quarries will be operational throughout the plan period and that allocated extensions for both quarries (as envisaged under Publication MLP Allocations 02 and 03) will also be permitted and available to commence aggregate working. Presently, Drybrook Quarry is not in use and no planning applications have been made to secure future working over the two allocated areas. Nevertheless, planning permission was granted back in 2014 to extend the timeframe of the previous permission at Dryrbook Quarry up to 2024[38]. There is also an application to extend the life of quarry infrastructure at Stowfield Quarry that has been recommended for approval subject to the completion of a section 106 legal agreement[39].

50. Increased working of crushed rock aggregate from within the Cotswold resource area could make a contribution to accommodating any loss in capacity resulting from the omission of Allocation 01. However, under current operating circumstances and established market trends, any such contribution would likely be extremely limited. The present maximum productive capacity of the entire Cotswold resource area is 0.75 mtpa, and once the annual localised demand has been taken into account (e.g. 0.4356mtpa), any *'spare'* capacity would only equate to just over 0.3 mtpa. In addition, the transferable nature of much of the county's two crushed rock aggregate types is highly questionable on technical and viability grounds. The differences in geography and properties of the minerals and the implications this has for their use, has resulted in a longstanding and well-established market split (i.e. the 70:30 split between Forest of Dean and Cotswolds resource areas). No evidence exists to indicate that the market split would respond. Even during recent periods of economic volatility and depressed demand, the pattern of Gloucestershire's crushed rock aggregate supply has remained stable with never more than a change of +5% or -5%.between the two resource areas.

51. The only other option for accommodating any loss in capacity would be to reply on alternative supplies from outside of Gloucestershire. As detailed within the Gloucestershire LAA, comparable resources are present in nearby and neighbouring mineral planning authorities (i.e. South Gloucestershire, North

[38] For more details see GCC Planning application reference: 14/0032/FDMAJM | vvariation of condition 2 to extend the time period for completion of quarrying and restoration

[39] GCC Planning reference: 16/0018/FDMAJM | Variation of conditions 45, 50 and 60 (vary the end date for use/operation of the quarry workshop and office, aggregates wash plant and aggregates recycling facility so that it is commensurate with mineral extraction or expiry of the planning consent 09/0013/FDMAJM

Somerset and Somerset). These resources already make a contribution to the local supply of crushed rock and therefore it is not unreasonable to consider some degree of increase. However, it is unclear how secure this option would be in the future, particularly as demand pressures elsewhere are anticipated to increase (e.g. ambitions growth proposals are currently be prepared across the West of England area)[40]. The South West Aggregate Working Party (SW-AWP) provides a well-establish mechanism for monitoring strategic-scale aggregate supply matters across mineral planning authorities and the County Council is an active participant in this group[41]. Furthermore, as outlined in the Publication MLP Duty to Co-operate (DtC) Statement[42], the County Council is also committed to ongoing monitoring and policy dialogue specifically with neighbouring mineral planning authorities through Memorandums of Understanding (MoUs). The agreed aim for signatories of MoUs is to facilitate the continued steady and adequate supply of aggregates including through cross-authority mineral movements.

Impact on productive capacity and potential yields – *'stress testing'* to assess the nature and scale of impacts on alternative crushed rock aggregate demand scenarios as a consequence of omitting Allocation 01: Land east of Stowe Hill Quarry

52. Paragraphs 48 to 51 of the supporting evidence paper (pages 23 to 24) set out alternative future supply scenarios for Gloucestershire. They include: projecting forward 3-year rather than 10-year average annual sales (the LAA rate); and the local translation of national and sub-national guidelines on future aggregate provision (2005 – 2020).

53. The remainder of this section discusses alternative future supply scenarios and the potential impact of not including Allocation 01. The assessment performs as a sort of *'stress test'* for the deliverability of a revision to the MLP. It considers the possible effectiveness of the number and scale of the remaining allocations for future crushed rock working.

Stress test 1: applying 3-year rolling average annual sales

54. Applying the current 3-year rolling average annual sales as a determinant of future demand, would generate a requirement of 1.540 mtpa *(an additional 80,000 tonnes year-on-year when compared to the LAA rate)*. For the Forest of Dean resource

[40] See Figure 4 of the 6th LAA for Gloucestershire (Nov 2017)
[41] See Section 5 of the Minerals Local Plan for Gloucestershire (2018 – 2032) Duty to Cooperate (DtC) Statement (Dec 2018)
[42] See Appendix 4 of the Minerals Local Plan for Gloucestershire (2018 – 2032) Duty to Cooperate (DtC) Statement (Dec 2018)

area the requirement would equal 1.078 mtpa. From an additional reserve perspective, maintaining the aggregate landbank of the Forest of Dean resource area would require provision to be made for up to 12.018 million tonnes. This is an increase of 1.6 million tonnes on that considered by the Publication MLP

55. An assessment of hypothetical demand scenarios is contained in the supporting evidence paper (Table 12 and supporting text on pages 30 and 31). It is possible to conclude from this that the Publication MLP would be capable of accommodating a change in provision requirements from the LAA rate to the 3-year rolling average[43].

56. The omission of Allocation 01 does not create a theoretical shortfall in productive capacity if the remaining quarries within the Forest of Dean resource area are operational and able to extend as discussed above under paragraph 50. However, the amount of provision containing the remaining allocations would be insufficient to adequately replenish exhausted reserves for the resource area. Unless new permissions outside of the plan's allocations were granted, a theoretical shortfall in the landbank would emerging equal to 0.618 million tonnes by the end of the plan period.

Stress test 2: applying national and sub-national guidelines

57. The local translation of national and sub-national guidelines for aggregates generates an annual requirement for Gloucestershire of 2.25 mtpa. For the Forest of Dean resource area this equates to 1.575 mtpa. In terms of maintaining the Forest of Dean resource area landbank in line with the plan requirements, provision for a further 24.94 million tonnes of crushed rock would be needed.

58. The absence of Allocation 01 would create a small theoretical shortfall in productive capacity across the Forest of Dean resource area equal to 0. 125 mtpa. Furthermore, the remaining allocations of a revised MLP would not be sufficient to adequately replenish the landbank of the Forest of Dean resource area. In the event that all potential yields from the remaining allocations were realised, a shortfall in reserves of 13.54 million tonnes would exist. This would result in a significantly diminished landbank for the Forest of Dean resource area As of 2032, only 3.785 million tonnes (or 2.4 years) of unworked reserves would in theory be available. The policy response to this would be a review of local mineral resources to ascertain whether new allocations could be achievable. This would likely form part of (at least) a partial review of the MLP. In addition, it is possible that industry may choose to respond outside of and / or alongside the plan-making process,

[43] Table 12 of the supporting evidence paper presents 5 alternative supply scenarios. The scenario of the LAA rate (2016) + 10% is broadly equivalent to the 3-year average rolling sales figure for crushed rock. The results show that the productive capacity contained in the Forest of Dean resource area would be more than capable of accommodating this supply pattern (139%).

through investigating future aggregate working opportunities within non-allocated areas.

Conclusion

59. Allocation 01: Land east of Stowe Hill Quarry is considered to be an important part of the aggregate strategy set out in Publication MLP. It could make a valuable contribution to maintaining a steady and adequate of supply of crushed rock from the county throughout and plan period. As part of a suite of allocations in the Forest of Dean resource area, Allocation 01 will facilitate sufficient operating capacity to meet envisaged future demand and also the adequate replenishment of exhausted reserves for the plan period and beyond (i.e. up to 10 years). The inclusion of Allocation 01 will also provide for a degree of flexibility to respond to changing circumstances. This includes possible increases in demand and / or the closure or reduction in output from mineral sites within the resource area over the plan period. It is important to highlight at this time that working of crushed rock is only taking place at Stowe Hill and Stowfield quarries and Drybrook Quarry is not operational, although an extant permission is in place.

60. The omission of Allocation 01 would not necessarily risk the deliverability of a revised MLP. It is theoretically possible that the remaining provision contained in the plan would be sufficient to meet both expected demand requirements and the necessary replenishment of exhausted reserves over the time horizon of the plan.

61. Nevertheless, it is fully acknowledged that removing Allocation 01 would introduce some uncertainty. There would be increased reliance upon the future working of other mineral sites and the delivery of the remaining allocations (i.e. from Drybrook and Stowfield quarries). A number of assumptions would also need to become a reality before steady and adequate supplies of crushed rock from the Forest of Dean resource area could be secured. These include all potential yields in allocations securing planning permission and the reactivation of Drybrook Quarry.

62. Furthermore, any upward change in aggregate demand over the plan period could risk the occurrence of shortfalls in local supply. This may manifest in insufficient productive capacity to keep pace with demand. In addition, over time the crushed rock landbank for the Forest of Dean resource area would degrade as insufficient resources would be available to replenish exhausted reserves. At the end of plan period the resource area would have no long term provision (i.e. less than 3 years) to support future supplies of crushed rock aggregate.

63. Finally, the prospect of mitigating the loss of Allocation 01 is a valid policy consideration. It could include the assumption of a degree of transfer of supply from the Forest of Dean to the Cotswolds resource area. However, the scale of what would be viable is presently unknown. No evidence exists to date to show how an alternative local supply trend could realistically operate.

64. There is also a possibility that the productive capacity of the Forest of Dean resource area could be increased at existing mineral workings. However, this would require new planning permissions and there is no certainty as to their acceptability. Furthermore, productive capacity increases is only really effective in responding to relatively modest increase in aggregate demand and would be no resolution to long-term supply challenges that would create the need for additional reserves to be identified. A significant reduction in the reserves is presented as a potential review trigger for the MLP under the proposed monitoring schedule[44].

65. It is also worth noting that the Publication MLP does contain a local policy framework for considering aggregate working that might come forward outside of allocated areas (Policy MA02). The policy includes amongst others, possible justifications for allowing working of non-allocated areas, such as the inability of the plan's allocations to maintain the desirable level of reserves (e.g. a minimum landbank of permitted reserves of crushed rock equal to 10 years worth of working). This might occur as a consequence of an increase in demand.

66. Industry may investigate non-allocated areas as a response to worsening aggregate reserves from the Forest of Dean resource area. This could happen alongside or independent to any 'triggered' MLP review. Indeed, the present undetermined planning applications for extended working at Stowe Hill Quarry would need to be considered against emerging or adopted MLP Policy MA02 (depending on the timeframe of future progress with the MLP) in the event a possible modification to omit Allocation 01 is incorporated into the plan. This circumstance will also be dependant on the application progressing to determination rather than being withdrawn by the applicant.

67. The only other means of mitigation would be to rely on supplies from outside of the county. Crushed rock aggregates from outside of Gloucestershire are already contributing to local consumption. However, it is unclear to what extent this could increase or whether even existing supply trends are sustainable.

[44] Publication MLP Monitoring Schedule, page 136

Section 4 | a schedule setting out which 'saved' adopted policies of the Gloucestershire Minerals Local Plan (1997 – 2006) MLP will be replaced by the Minerals Local Plan for Gloucestershire (2018 – 2032)

Policy	Title	Status (i.e saved or not saved under transitional arrangements)	Proposed Action
E1	International and European Sites of Nature Conservation	Not Saved	Replaced by Policy DM06 | Biodiversity and Geodiversity
E2	Areas of Outstanding Natural Beauty	Saved	Replaced by Policy DM09 | Landscape
E3	Nationally Important Sites of Nature Conservation	Not Saved	Replaced by Policy DM06 | Biodiversity and Geodiversity
E4	Nationally Important Archaeological Sites (including Scheduled Ancient Monuments)	Saved	Replaced by Policy DM08 | Historic Environment
E5	Listed Buildings and Conservation Areas	Not Saved	Replaced by Policy DM08 | Historic Environment
E6	Other Nationally Important Sites of Historic Interest	Saved	Replaced by Policy DM08 | Historic Environment
E7	Best and Most Versatile Agricultural Land	Not Saved	Replaced by Policy DM07 | Soil Resources
E8	Regionally and Locally Important Designated Sites	Saved	Replaced by Policy DM06 | Biodiversity and Geodiversity
E9	Green Belt	Saved	Replaced by Policy DM10 | Gloucester-Cheltenham Green Belt
E10	National, Regional and Local Biodiversity	Saved	Replaced by Policy DM06 | Biodiversity and Geodiversity
E11	Protection of the Water Environment	Saved	Replaced by Policy DM05 | Water resources
E12	Flood Risk/Flood Plain Development	Not Saved	Replaced by Policy DM04 | Flood risk
E13	Riparian Buffer Zones	Saved	Replaced by a combination of Policy DM04 | Flood risk and Policy DM05 | Water resources
E14	Protecting the Local Environment – County-Wide	Saved	Replaced by DM01 | Amenity, DM02 | Cumulative impact and DM09 | Landscape
E15	Protecting the Local Environment – Cotswolds Water Park	Saved	Replaced by DM01 | Amenity, DM02 | Cumulative impact, and DM09 | Landscape
E16	Economic Development	Saved	Replaced by DM01 | Amenity and DM02 | Cumulative impact
E17	Safeguarding Public Access	Saved	Replaced by DM03 | Transport
E18	Opportunities for Improved Access	Saved	Replaced by DM03 | Transport
E19	Transport	Saved	Replaced by DM03 | Transport
E20	Highways	Saved	Replaced by DM03 | Transport
E21	Safeguarding Railhead and Wharves	Not Saved	Replaced by MS02 | Safeguarding mineral infrastructure
A1	County Contribution to the local apportionment of the Regional Guidelines	Saved	Replaced by MW01 | Aggregate provision
A2	Landbanks	Saved	Replaced by MW01 | Aggregate provision
A3	Future Aggregates Mineral Development within Preferred Areas	Saved	Replaced by MA01 | Aggregate working within allocations and MW01 | Aggregate provision
A4	Future Aggregates Mineral Development outside Preferred Areas	Saved	Replaced by MA02 | Aggregate working outside of allocations and MW01 | Aggregate provision

A5	Areas of Future Crushed Rock Aggregates Mineral Development – Forest of Dean	Saved	Replaced by MA01 | Aggregate working within allocations and MW01 | Aggregate provision
A6	Areas of Future Crushed Rock Aggregates Mineral Development – Cotswold	Saved	Replaced by MA01 | Aggregate working within allocations and MW01 | Aggregate provision
A7	Areas of Future Sand and Gravel Aggregates minerals Development – Upper Thames Valley	Saved	Replaced by MA01 | Aggregate working within allocations and MW01 | Aggregate provision
NE1	Supply of Building Stone	Saved	Replaced by Policy MW02 | Natural building stone
NE2	Clay	Saved	Replaced by Policy MW03 | Clay for civil engineering purposes and Policy MW04 | Brick clay
EM1	Opencast Coal Extraction	Saved	Replaced by Policy MW05 | Coal
EM2	Small Scale Underground Mining	Saved	Replaced by Policy MW05 | Coal
EM3	Colliery Spoil	Saved	Replaced by Policy MW05 | Coal
EM4	Existing Colliery Spoil Tips	Saved	Replaced by Policy MW05 | Coal
EM5	Reworking Colliery Spoil Tips	Saved	Replaced by Policy MW05 | Coal
EM6	Oil and Gas	Not Saved	The policy has not been replaced and as it was not saved, does not remain in force. Please refer to paragraphs 55-64 of the new MLP for an explanation.
EX1	Mineral Exploration	Not Saved	The policy has not been replaced and as it was not saved, does not remain in force. Please refer to paragraphs 55-64 of the new MLP for an explanation.
SE1	Processing Secondary Materials	Not Saved	Replaced by SR01| Maximising the use of secondary and recycled aggregates, MS02 | Safeguarding mineral infrastructure and MW06 | Ancillary minerals development
SE2	Minerals Waste Minimisation	Not Saved	Replaced by MR01 |Restoration, aftercare and facilitating beneficial after-uses and MA02 | Aggregate working outside of allocations
SE3	Safeguarding Mineral Resources	Not Saved	Replaced by MS01 | Non-mineral developments within MSAs and MS02 | Safeguarding mineral infrastructure
SE4	Prior Extraction of Mineral Resources	Not Saved	Replaced by MS01 | Non-mineral developments within MSAs
R1	Beneficial Reclamation of Worked-Out Mineral Sites	Saved	Replaced by MR01 |Restoration, aftercare and facilitating beneficial after-uses
R2	After-use	Saved	Replaced by MR01 |Restoration, aftercare and facilitating beneficial after-uses
R3	Progressive Restoration	Saved	Replaced by MR01 |Restoration, aftercare and facilitating beneficial after-uses
R4	Enhancing Worked-Out Mineral Sites	Saved	Replaced by MR01 |Restoration, aftercare and facilitating beneficial after-uses
DC1	Mitigation of Environmental Effects	Saved	Replaced by DM01 | Amenity, DM02 | Cumulative impact, DM03 | Transport, DM05 | Water resources, DM06 | Biodiversity and Geodiversity and DM07 | Soil Resources
DC2	Ancillary Development	Saved	Replaced by MW06 | Ancillary minerals development

DC3	Importation of Material	Saved	Replaced by MR01 |Restoration, aftercare and facilitating beneficial after-uses
DC4	Safeguarding Aerodromes	Saved	Replaced by Policy DM11 | Aerodrome safeguarding and aviation safety
DC5	Planning Obligations	Saved	This policy has been superseded by the CIL Regulations. As such it no longer remains in force and has not been replaced.
DC6	Planning Obligations – Eastern Spine Road	Saved	This policy has been superseded by the CIL Regulations. As such it no longer remains in force and has not been replaced.
DC7	Borrow Pits	Saved	Replaced by policies MA02 | Aggregate working outside of allocations, MW01 | Aggregate provision, MW02 | Natural building stone, MW03 | Clay for civil engineering purposes, Policy MW04 | Brick clay and MW05 | Coal

Section 5 | a schedule of possible main modifications to the Publication MLP that the MPA deems are likely to be required. The modifications will if necessary, be brought before the appointed inspector for consideration at examination hearing sessions. Where appropriate, they will be formally requested under the provisions of section 20(7C) of the Planning and Compulsory Act 2004

Policy / supporting text references	**Possible main modifications** **Proposed deletions are** ~~strikethrough~~ and additional text is **underline and bold**	**Reason for possible main modifications**
Supporting text to Policy MS01 (Table 2, page 37)	Add a new bullet point item at the end of the list in Table 2 of Publication MLP page 37:- • **All development considered under the 'Permission in Principle' consent route unless the Mineral Planning Authority specifically requests that a Mineral Resource Assessment is included on the local Brownfield Land Register entry or a 'Permission in Principle' decision notice."**	In response to representation: 852145/6/MS01/USND. The representation suggested additional non-mineral development types should be exempt from mineral resource safeguarding. After careful consideration these have been proposed as a possible main modification.
Supporting text to Policy MS01 (paragraph 122)	Revise Publication MLP paragraph 122:- ~~A MRA will need to consider the site-specific nature of the mineral resources present along with an analysis of the relationship between these resources and the proposed non-minerals development.~~ **The MRA must meet PERC Reporting Standards** [New footnote]**. It must determine the category of mineral resources that are present (i.e. 'Inferred', 'Indicated' or 'Measured') and carefully analyse site-specific circumstances to determine whether there will be a risk of sterilisation from proposed non-minerals development and its significance.** ~~In addition to assessing~~ **In making a judgement, careful consideration will be given to technical details concerning** the extent to which non-minerals development may **affect access to currently worked minerals and / or unworked, but potentially exploitable resources on the application site and / or nearby, within the sphere of influence of the proposal** ~~overlay mineral resources, attention should be given to accessibility issues affecting the potential to exploit unworked and currently worked resources.~~ The risk of unreasonably curtailing / constraining permitted mineral working activities should also be investigated. [New footnote] **PERC refers to Pan-European Reserves and Resources Reporting Committee Standard of Exploration, Results and Mineral Resources**	In response to representations: 924705/4/MS01/USND 808023/5/MS01/USND The representations raised concern as to the ability of the policy to effectively safeguard mineral resources by virtue of the matter being afforded sufficient and appropriate consideration at the planning application stage. The possible modification put forward seeks to expand local guidance to ensure that applicants are in no doubt as to what is expected of them should they need to respond to mineral resource safeguarding matters.

Policy MW01	Revise the 1st clause of Publication MLP Policy MW01: I. they will make a contribution towards maintaining throughout and at the end of the plan period an aggregate landbank requirement of at least 10 years for crushed rock or at least 7 years for sand & gravel, calculated ~~using the rolling 10 years' sales data presented in the~~ **with the most recent** annual Gloucestershire Local Aggregates Assessment; and	In response to representations 808023/7/MW01/COM; 807759/1/MW01/COM The representations passed a comment as to the potential lack of flexibility in the policy regarding the approach to calculating aggregate landbanks. The possible modification proposed clarifies the use data sourced from Local Aggregates Assessments (LAA) covering Gloucestershire. This is the means by which aggregate landbanks should be kept up-to-date and able to maintain their relevance as supported by national policy. A draft Statement of Common Ground has been prepared in respect of the possible modification and representation: 807759/1/MW01/COM. This will hopefully be concluded in advance of any potential examination hearing sessions.
Supporting text to Policy MW02 (paragraph 174)	Revise the final sentence of Publication MLP paragraph 174:- In carrying out an assessment of sustainability, a review of the potential impacts on key designations will be required. Attention must be given to key designations present in the locality such as the valued landscapes of the Cotswolds and Wye Valley AONBs. The scale and significance of any impacts on the conservation of the landscape and scenic beauty, and ability to protect wildlife and cultural heritage will be of paramount importance. Meeting the relevant criteria set out in policies DM06, DM08 and DM09 and MR01 will be crucial. However, as supported by national policy, a degree of flexibility may be shown when analysing individual proposals for small-scale natural building stone working**.** ~~**s**, which are likely to operate over a protracted timescale, experience low rates of working and / or periods of intermittency~~ **On a case by case basis it may be justified for proposals to involve relatively low rates of extraction, periods of intermittent working and as a consequence, relatively longer planning permission timeframes than would otherwise be anticipated and desirable**[84].	In response to representations: 1169771/8/MW02/USND, 793504/3/MW02/USND; 793895/3/MW02/USND; 802358/3/MW02/USND; 1170897/2/MW02/USND; 794030/3/MW02/USND and 820738/3/MW02/USND The representations raised concern as to the ability of future proposals to prove their sustainable credentials in order to meet the 1st clause 1 of MLP Policy MW02. The possible modification makes clear as to the type of operational circumstances under which natural building stone can sometimes be worked, which should be taken into account.

Supporting text to Policy MW02 (paragraph 176)	Revise the 5th and 6th sentences of Publication MLP paragraph 176:- Natural building stone working may positively contribute to the economic well-being and cultural heritage of the county's rural local communities. This may arise through the direct and indirect employment opportunities being offered. Support for new or sustained local skilled labour, particularly traditional quarrying-related skills may be a noteworthy benefit. Appropriate provision for local apprenticeships secured either by way of a planning condition or a planning obligation could be materially significant[86]. However, it is equally important to demonstrate how any potential negative economic impacts will be ~~sufficiently outweighed~~ **avoided, mitigated or justifiably outweighed.** An assessment**, which identifies and then analyses the significance** of **any** possible **economic** impacts on ~~the future economic performance of other industries~~ **business** that ~~are~~ operat**e**~~eing~~ locally and ~~/ or which are being promoted through regeneration and growth initiatives may represent justified and credible evidence.~~ **whose activities could be sensitive to environmental change brought about by proposals for mineral working, will represent credible and valuable evidence in respect of this matter.**	In response to representations: 793504/3/MW02/USND; 793895/3/MW02/USND; 802358/3/MW02/USND. 1170897/2/MW02/USND; 794030/3/MW02/USND and 820738/3/MW02/USND The representations raised concern that the supporting text fails to properly attribute the potential economic (amongst other) benefits of natural building stone for determining future proposals. In response, the proposed possible modification clarifies what economic matters should be addressed both in terms of highlighting and maximising potential benefits, but also in addressing the possible occurrence of negative impacts
Policy MW06	Revise the final clause of Publication MLP Policy MW06:- V. a positive contribution will be made to sustaining or growing the local economy and ***/ or*** upholding cultural heritage throughout Gloucestershire.	In response to representation: 808023/9/MW06/COM The representation queries the application of the final clause of MLP Policy MW06 through the use of an example of a type of ancillary minerals development, which doesn't appear to fit with the policy requirement. The possible modification would address this by reducing the policy requirement to ensure that local economic benefits alone, without needing to demonstrate cultural heritage benefits could also be applied.

Supporting text to Policy MW06 (paragraph 217)	Revise the 1st sentence of Publication MLP paragraph 217:- A comparative analysis will be required **for ancillary minerals development proposals involving the importation of minerals** where existing, permitted alternative arrangements are potentially available nearby. Evidence as to why it is not practicable and / or viable to use alternative facilities will be necessary. The ability to achieve certain product specifications and / or to facilitate the creation of desirable blended products could be a reasonable justification, although this will need to be demonstrated through supporting evidence. In addition, information concerning the efficient movement of minerals could also prove to be significant. A justification will be necessary to show how allowing ancillary development rather than using alternative facilities will make a positive contribution to reducing transport-related impacts and / or greenhouse gas emissions by way minimising freight miles travelled or the use of more appropriate freight routes. The plans for site restoration and the impact on its timely delivery at the proposal site and alternative facilities should also be factored into the analysis.	In response to representations 794030/5/MW06/USND, 820738/5/MW06/USND, 793504/5/MW06/USND, 793547/4/MW06/USND, 793895/5/MW06/USND and 802358/4/MW06/USND The representations raised concern as to potential unreasonably onerous requirements for demonstrating the acceptability of ancillary minerals development proposals. In response the possible modification clarifies that a 'comparative analysis' of alternative options should only apply where importation of unprocessed or partially-processed minerals from elsewhere is proposed
Policy MA01	Remove the reference to "Allocation 01: Land east of Stowe Hill Quarry…" and re-number the remaining allocations accordingly.	In response to representations: 1028219/13/MA01/USND, 855353/18/MA01/USND, 1116790/2/MA01/USND; 852145/11/MA01/USND and 1169920/1/MA01/USND The representations did not consider that Allocation 01 should be included in the MLP for a number of reasons detailed in the representations and elsewhere in the plan. After careful consideration of the evidence submitted, a possible modification is proposed that will omit the allocation. Statements of Common Ground have been prepared and co-signed in respect of the possible modification and representations: 1116790/2/MA01/USND and 169920/1/MA01/USND

Policy MA02	A number of revisions to Publication MLP Policy MA02:- Mineral development proposals for aggregate working outside of allocations will be permitted only where **one or more of the following** ~~it~~ can be demonstrated: - I. the plan's allocations as set out in policy MA01 are not able to contribute towards maintain**ing** minimum landbank levels in accordance with policy MW01; ~~and / or~~ II. constraints on the availability of existing permitted reserves and / or productive capacity are likely to limit output or restrict the range of available products over the plan period; ~~and / or~~ III. they represent the residual working of an area of aggregate mineral resource that is permitted or ~~planned to be worked and would~~ **or would function as enabling development for planned future working, which** otherwise be impractical to exploit in any other way; ~~and / or~~ IV. they will **not prejudice the delivery of previously approved restoration plans and facilitate materially significant enhancements to site restoration that will support the achievement of beneficial after-uses and will have satisfactorily met the requirements of policy MR01 (Restoration, aftercare and facilitating beneficial after-uses)** ~~facilitate enhancements to previously approved plans for mineral restoration and the achievement of beneficial after-uses that will outweigh the desirability to restrict working from outside of allocated areas;~~ ~~and / or~~ V. they will facilitate the working of aggregate minerals prior to non-minerals development taking place in accordance with policy MS01. **VI they represent a borrow pit that is justifiably required to facilitate the delivery of a specified development project and will be fully reclaimed as part of that project**	In response to representations: 793547/6/MA02/USND, 802358/6/MA02/USND, 808023/11/MA02/COM and 807759/2/MA02/SND The representations provided comments and concern over the type of aggregate working that would be considered justified outside of the plan's allocations. In response, the possible modification provides both clarification and sets out additional circumstances that could reasonably be taken into account. The most notable addition is specific provision for 'borrow pits'. A draft Statement of Common Ground has been prepared in respect of the possible modification and representation: 807759/2/MA02/SND. This will hopefully be concluded in advance of any potential examination hearing sessions.
Supporting text to Policy MA02 (after paragraph 240)	New paragraph to be inserted after Publication MLP paragraph 240: **A borrow pit cannot be precisely defined in terms of quantity of mineral worked or duration. However, in order for mineral working to be classified as such, a direct functional link between the exploitable mineral and the delivery of a named, permitted development must be shown. The consequences of the relationship must also meaningfully contribute towards the achievement of sustainable development. To demonstrate this evidence of environmental or other planning benefits compared to obtaining minerals from alternative sources will be necessary. In addition, all mineral operations must be tied to the development and the timeframe associated with site restoration and aftercare will need to be aligned with the completion of the development. A borrow pit is typically located next to, or nearby to the development it is supporting. It is also usually the case that any restoration materials that may be required will arise, at least in part, from the construction of the supported development. However, under all circumstances site restoration of a borrow pit must be acceptable in planning terms having been appropriately assessed against the relevant development management plan**	In response to representations: 793547/6/MA02/USND, 802358/6/MA02/USND, 808023/11/MA02/COM and 807759/2/MA02/SND In light of the possible modification proposed to Policy MA02, an additional explanatory paragraph is presented.

	policies from DM01 to DM11 and policy MR01.	
Supporting text to Policy DM01 (paragraph 273)	Revise 1st, 2nd and final sentences of Publication MLP paragraph 273:- At the early preparation stage for minerals development proposals, a HIA screening exercise ~~should to be carried out~~ **is recommended**. This ~~must~~ **should** establish whether preparing a HIA will represent the most efficient and effective way of presenting supporting evidence on health matters and for determining the 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. In the event that a HIA is to be prepared, the screening exercise should provide a sound basis for understanding the size and nature of the local communities likely to be affected and to identify in the broadest of terms, what potential risks **to** and impacts on health could occur – positively and / or negatively and in terms of their significance.	In response to representations 924705/7/DM01/USND; 808023/14/DM01/USND; 794030/7/DM01/USND; 820738/7/DM01/USND, 793504/7/DM01/USND; 793895/7/DM01/USND and 802358/9/DM01/USND The representations questioned the requirement to assess health impacts and considered the exercise to be onerous and unreasonable. The possible modification clarifies that the carrying of a specific standalone health impact assessments is not mandatory.
Supporting text to Policy DM01 (paragraph 281)	Revise the 4th sentence of the Publication MLP paragraph 281:- Mineral developments can impact upon local air quality. This may occur through the release of particulates from emissions and dust, and on 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 founded on the advice contained in planning practice guidance ~~should be provided alongside~~ **may be necessary to support** mineral development proposals[135]. Assessments 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.	In response to representations: 924705/7/DM01/USND; 808023/14/DM01/USND; 794030/7/DM01/USND; 820738/7/DM01/USND; 793504/7/DM01/USND; 793895/7/DM01/USND and 802358/9/DM01/USND The representations raised broad concerns over the way in which amenity matters have been considered. In response, the possible modification clarifies the requirements as set out by national guidance for air pollution.

Policy DM03	A number of revisions to Publication MLP Policy DM03:- Part a | Alternatives to road transport Mineral development proposals will be permitted **where it is demonstrated that road based transport will be minimised and that where possible, alternative and** ~~that use~~ more sustainable~~, alternative~~ modes of non-road transport **will be used**. 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 satisfactor**il**y mitigated; and / or	In response to representations 852145/13/DM03/USND; 820738/9/DM03/USND; 794030/9/DM03/USND; 924705/8/DM03/USND; 802358/11/DM03/USND; 793504/9/DM03/USND and 793895/9/DM03/USND The representations raised comments and concerns regarding the accuracy of the policy in adhering to the requirements of national policy and practice guidance. The possible modification clarifies the approach being taken by the MLP and improves readability, particularly in respect of responding to opportunities to use alternatives to road transport
Supporting text to Policy DM03 (paragraph 303)	Revise the 3rd sentence of Publication MLP paragraph 303: - 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[151]. Particular issues ~~likely to be scrutinised~~ **that should be considered** include: - network capacity; ~~maintenance~~ **the impact upon the normal cycle of programmed highway maintenance**, safety of road users, debris on the highway and related amenity impacts such as noise, dust, vehicular vibration, and air and water pollution. 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.	In response to representation: 854632/3/DM03/USND The representation raised concern that unreasonable 'wear and tear' of the highway associated with mineral traffic was not afforded sufficient attention and therefore wouldn't be satisfactorily addressed. The possible modification clarifies that the matter is relevant and should be taken into account.
Policy DM04	A number of revisions to Publication MLP Policy DM04: - Mineral development proposals will be permitted, where it can be demonstrated: **-** **I.** ~~they will be resilient to the impacts of flooding;~~ **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.** ~~there will be no increase in the risk of flooding from all sources now and in the future; and~~ **wherever possible, flood risk reduction initiatives will be**	In response to representation: 1169920/2/DM04/USND The representation raised concern as to the soundness of the policy. In response, a significant possible modification is proposed that addresses each of the matters identified. A Statement of Common Ground has also been prepared and co-signed in respect of the possible

	incorporated that will achieve a reduction in the risk of flooding overall; **III.** ~~wherever possible, flood risk betterment initiatives will be delivered.~~ **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 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), or equipment should be designed to remain operational, safe for users, and flood resilient during a flood event.** ~~The application of a sequential test that will favour the location of development within Flood Zone 1 is fundamental to assessing the acceptability of mineral developments and will be required as part of the supporting evidence for proposals.~~ **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 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), or equipment is**	modification.

	designed to remain operational, safe for users, and flood resilient during a flood event. ~~Part a | Proposals located within Flood Zone 2~~ ~~Mineral development proposals will be permitted in Flood Zone 2, where it can be shown no reasonable alterative locations within Flood Zone 1 are available.~~ ~~Part b | Proposals located within Flood Zone 3a~~ ~~Mineral development proposals will only be permitted in Flood Zone 3a, where they are classified as 'less vulnerable' or 'water compatible' and it can be demonstrated that no reasonable alternative locations are available within both Flood Zones 1 and 2.~~ ~~Part c | Proposals located within Flood Zone 3b (the functional floodplain)~~ ~~Mineral development proposals will only be permitted in Flood Zone 3b, where it can be demonstrated: -~~ ~~I. they are classified as 'water compatible'; and~~ ~~II. there will be no net loss of floodplain storage, no impediment to water flows, and no increase in flood risk elsewhere; or~~ ~~III. wider sustainability benefits to the community exist that outweighs the risk of flooding as determined through an exception test.~~ ~~Part d | Proposals exceeding 1 ha within Flood Zone 1 and all other proposals within Flood Zones 2, 3a or 3b~~ **Mineral development proposals <u>in areas of flood risk and where they exceed 1ha</u> must be accompanied by a Flood Risk Assessment (FRA) that ~~will~~ show<u>s</u> 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 <u>the following</u>: -** • **<u>all</u> current and future sources of flooding, appropriately taking into account the <u>anticipated</u> impacts of climate change;** • ~~set out~~ **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.**	
Supporting text to Policy DM04 (paragraph 322)	Revise the 2nd and 3rd sentences of Publication MLP paragraph 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 theses 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 **form part of the assessment of flood risk** ~~adhere to these requirements~~, including all built structures, the working of minerals themselves and also the carrying out of restoration and aftercare.	In response to representation: 1169920/3/DM04/USND The representation suggested additions and changes to the supporting text to Policy DM04. These are proposed as a possible modification. A Statement of Common Ground has also been prepared and co-signed in respect of the possible modification.
Policy DM05	A number of revisions to Publication MLP Policy DM05: - Mineral development proposals will be permitted where it can be demonstrated: - **I.** there will be no ~~**deterioration**~~ **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.** ~~**they will not prejudice the quantity of water contained within water bodies;**~~ **measures will be incorporated to enhance and protect water quality, including Gloucestershire's groundwater resources;** **III.** ~~**due regard has been given to the actions and objectives of the Severn and / or Thames River Basin Management Plan (RBMP) in striving to protect and improve the quality of water bodies**~~ **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 **(New Footnote), 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**	In response to representations: 794030/12/DM05/USND, 820738/12/DM05/USND, 793504/12/DM05/USND, 793895/12/DM05/USND, 802358/14/DM05/USND and 1169920/4/DM05/USND Representation 1169920/4/DM05/USND raised notable concern as to the soundness of the overall policy. Whilst all other representations specifically focused on the approach to responding to watercourses affected by minerals development proposals. In response to the representations a significant possible modification is proposed. A Statement of Common Ground has also been prepared and co-signed in respect of part of the possible modification (changes to clauses i to iii and clause v) and representation: 1169920/4/DM05/USND.

	V. Wherever possible, measures to achieve the efficient use of water will be delivered **including incorporating appropriate water conservation techniques.** New Footnote - **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**	
Supporting text to Policy DM05 (paragraph 335)	Revise Publication MLP paragraph 335:- Mineral development proposals **may benefit from** ~~should be supported by~~ a hydrological and hydrogeological assessment that ~~provides~~ **incorporates** an analysis ~~of risk to~~ water **quality and quantity** ~~resources and how any possible adverse~~ impacts ~~will be avoided or mitigated~~. ~~In line with planning practice guidance,~~ ~~t~~**T**he assessment **must be carried out where it is anticipated water quality impacts pose a significant** ~~should identify the water bodies that represent potential~~ planning concern ~~– those directly affected through proposed modifications or as a consequence of indirect activities178~~. ~~The assessment must also consider 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.~~ 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.	In response to representation: 1169920/5/DM05/USND The representation raised concern as to the content of the supporting text covering the assessment of hydrogeological matters. In response, a significant possible modification is proposed that addresses individual issues identified. A Statement of Common Ground has also been prepared and co-signed in respect of the possible modification.

Supporting text to Policy DM05 (paragraph 336)	Revise the 1st, 4th and 6th sentences to Publication MLP paragraph 336:- ~~In preparing a hydrological and hydrogeological~~ **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 and set out actions to be taken to ensure **improvements where possible, or to secure** ~~there is~~ no deterioration in the quality of 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 ~~improvements~~ **ambitions** outlined within the relevant River Basin Management Plan.	In response to representation: 1169920/5/DM05/USND The representation raised concern as to the content of the supporting text covering the assessment of water quality matters. In response, a possible modification is proposed that addresses individual issues identified. A Statement of Common Ground has also been prepared and co-signed in respect of the possible modification.
Supporting text to Policy DM05 (paragraph 337)	Revise the 4th and final sentence of Publication MLP paragraph 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 ~~are located near to~~ **that 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, which may 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 (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 rigorous scrutinised including consultation with the Environment Agency and / or the Lead Local Flood Authority to ensure that an acceptable and deliverable scheme is brought forward that will secure wherever possible, the minimum degree of change and / or alteration necessary.**	In response to representations 794030/12/DM05/USND, 820738/12/DM05/USND, 793504/12/DM05/USND, 793895/12/DM05/USND and 802358/14/DM05/USND The representations identified a potential difficulty in the approach to mineral developments and watercourses. The possible modification to the supporting text reflects the changes proposed to Policy DM05 and clarifies how applicants should respond to proposals that may unavoidably affect the integrity of a watercourse(s).

Policy DM07	Revise the 2nd and 4th clause of Publication MLP Policy DM07: - 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** ~~opportunities for~~ soil quality ~~enhancement~~ will be **delivered** ~~facilitated~~; 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 and any other potential adverse impacts will be kept to a minimum; or IV. the 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 the grant of planning permission.	In response to a review of the policy instigated by the comments made under representation 924705/10/DM07/USND. The possible modification does not seek to resolve the particular concern that has arisen. Instead, it is directed at improved alignment with national policy and guidance on soil protection matters.
Supporting text to Policy DM08 (paragraph 372)	Revise 1st sentence of Publication MLP paragraph 372:- However, in recognition that certain archaeological assets may not be identifiable or fully appreciated early on in the decision making process, it ~~may be~~ **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 employed, where necessary.	In response to representation: 793641/2/DM08/COM The representation clarified that a staged / phased approach to the assessment of archaeology assets is wholly appropriate. The possible modification confirms this.
Supporting text to Policy DM10 (paragraph 397)	Revise 1st and 2nd sentence of Publication MLP paragraph 397:- National policy also makes provision for mineral **extraction** ~~working~~ 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 and spatial effects of mineral extraction on the openness of the Green Belt will be required by decision makers.** ~~This is reflective of the temporary nature and low intensity of any built structures such as certain forms of plant that usually accompanies~~	In response to representation: 793547/9/DM10/USND The representation commented on how the supporting text to Policy DM10 could assist in advising applicants how they should respond to the issue of Green Belt 'openness' with minerals development proposals. In response, the

	~~this type of activity.~~	possible modification clarifies that there are two key components to an openness assessment – visual impact and spatial effects.
Supporting text to Policy MR01 (paragraph 428)	Importing **treated** ~~recovered~~ 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]. ~~However,~~ **For the latter,** the relevant criteria contained within adopted Gloucestershire Waste Core Strategy policy WCS 8 (Landfill) will need to be successfully addressed[262].	In response to representations: 808023/26/MR01/USND; 793547/10/MR01/USND 802358/22/MR01/USND, 793504/18/MR01/USND, 793895/18/MR01/USND, 820738/18/MR01/USND; and 794030/18/MR01/USND. The representations raised concern as to how imported materials for restoration purposes, which could be categorised as waste, will be dealt with. Whilst a number of points made are contested, a possible modification would be beneficial for clarity purposes.
Appendix 1 – Key Diagram	Delete Allocation 01 from the Key Diagram and re-number other allocations accordingly	In response to representations: 1028219/20/AL01/USND; 855340/3/AL01/USND; 852145/24/AL01/USND; 1169539/2/AL01/USND; 1169920/6/AL01/USND; and 1116790/3/AL01/USND. The representations sought the removal of Allocation 01: Land east of Stowe Hill Quarry from the Publication MLP. The possible modification accompanies a number of other proposed modifications and would be needed to complete the removal of the allocation entirely from the plan.

Appendix 4 **Allocation 01 - Land east of Stowe Hill Quarry**	Remove pages 145 to 150, which present in full the Detailed Development Requirements for Allocation 01: Land east of Stowe Hill Quarry.	In response to representations: 1028219/20/AL01/USND; 855340/3/AL01/USND, 852145/24/AL01/USND, 1169539/2/AL01/USND, 1169920/6/AL01/USND; and 1116790/3/AL01/USND. The representations sought the removal of Allocation 01: Land east of Stowe Hill Quarry from the Publication MLP. The possible modification accompanies a number of other proposed modifications and would be needed to complete the removal of the allocation entirely from the plan. A Statement of Common Ground has also been prepared and co-signed in respect of the possible modification and representations: 1169920/6/AL01/USND and 1116790/3/AL01/USND
Appendix 4 **Allocation 02: Land west of Drybrook Quarry** **'Water resources' theme**	Revise the Water resources theme for Publication MLP Allocation 02:- A hydrological / hydrogeological impact assessment in accordance with EA guidance will be required. As the underlying geology of the allocation is classified as a Principal aquifer, attention will need to be given to identifying and quantifying risks associated with all possible minerals-related development activities (e.g. working, processing and site restoration) to groundwater resources and for establishing a stringent monitoring regime commencing at least 12-months prior to development, continuing throughout the operational phase and including site restoration and aftercare. In addition, potential hydrological impacts on nearby surface water bodies (within 1km) will require scrutiny. These includes: - Cinderford Brook to Blackpool Brook, Dry Brook, Bailey Brook, Lodgegrove Brook and the quarry lagoons within the existing Drybrook Quarry. Although a more definitive sphere of hydrological influences will need to be established through a Water Features Survey. This could identify other and / or more distant surface water bodies that are also worth assessing along with other relevant receptors. Possible cumulative / incombination hydrological / hydrogeological impacts associated with permitted mineral working and other related activities should also be considered such as proposed restoration and aftercare at the existing Drybrook Quarry. The HIA must scrutinise the need to employ mitigation and where necessary provide a strategy for implementation. It must also incorporate a strategic, catchment-scale view of water	In response to representation: 1169920/7/AL02/COM The representation advised on improvements to the detailed development requirements for the allocation to take account of Water Framework Directive (WFD) matters. The possible modification responds accordingly to the advice. A Statement of Common Ground has also been prepared and co-signed with the respondent in respect of the possible modification.

	resource management and identify how development of the allocation may positively contribute towards protecting and improving the water environment in line with the Severn River Basin Management Plan (RBMP)[281] **and Wye and Severn Vale Catchment Management Plans** New web linked footnote	
Appendix 4 **Allocation 03: Depth extension to Stowfield Quarry** **'Water resources' theme**	Revise the Water resources theme for Publication MLP Allocation 03:- A hydrological / hydrogeological impact assessment in accordance with EA guidance will be required. As the underlying geology of the allocation is classified as a Principal aquifer, attention will need to be given to identifying and quantifying risks associated with all possible minerals-related development activities (e.g. working, processing and site restoration) to groundwater resources and for establishing a stringent monitoring regime commencing at least 12-months prior to development, continuing throughout the operational phase and including site restoration and aftercare. In addition, potential hydrological impacts on nearby surface water bodies (within 1km) will require scrutiny. These includes: - Whippington Brook, an unnamed drain, tributary and pond at Swan Pool, and the lagoon within Stowfield Quarry. Although a more definitive sphere of hydrological influences will need to be established through a Water Features Survey. This could identify other and / or more distant surface water bodies that are also worth assessing along with other relevant receptors. Possible cumulative / in-combination hydrological / hydrogeological impacts associated with permitted mineral working and other related activities such as proposed restoration and aftercare at the existing Stowfield Quarry should also be considered. The HIA must scrutinise the need to employ mitigation and where necessary provide a strategy for implementation. It must also incorporate a strategic, catchment-scale view of water resource management and identify how development of the allocation may positively contribute towards protecting and the improving water environment in line with the Severn River Basin Management Plan (RBMP)[286] **and Wye and Severn Vale Catchment Management Plans.** New web linked Footnote	In response to representation: 1169920/8/AL03/COM The representation advised on improvements to the detailed development requirements for the allocation to take account of Water Framework Directive (WFD) matters. The possible modification responds accordingly to the advice. A Statement of Common Ground has also been prepared and co-signed with the respondent in respect of the possible modification.

Appendix 4 **Allocation 04: Land northwest of Daglingworth Quarry** **'Water resources' theme**	Revise the Water resources theme for Publication MLP Allocation 04:- A hydrological / hydrogeological impact assessment in accordance with EA guidance will be required. As the underlying geology of the allocation is classified as a Principal aquifer, attention will need to be given to identifying and quantifying risks associated with all possible minerals-related development activities (e.g. working, processing and site restoration) to groundwater resources and for establishing a stringent monitoring regime commencing at least 12-months prior to development, continuing throughout the operational phase and including site restoration and aftercare. The allocation also lies within a Source Protection Zone 1 (SPZ1). This will require a very specific risk assessment to be carried out to consider potential pollution of potable water supplies and other sensitive commercial water supplies. Beyond the allocation, potential hydrological impacts on nearby surface water bodies (within 1km) will require scrutiny. These include: - Elkstone Brook and Daglington Stream. Although a more definitive sphere of hydrological influences will need to be established through a Water Features Survey. This could identify other and / or more distant surface water bodies that are also worth assessing along with other relevant receptors. For example, the River Churn is just over 3 km to the South East of the allocation. Possible cumulative / in-combination hydrological / hydrogeological impacts associated with permitted mineral working and other related activities such as proposed restoration and aftercare at the existing Daglingworth Quarry should also be considered. The HIA must scrutinise the need to employ mitigation and where necessary provide a strategy for implementation. It must also incorporate a strategic, catchment-scale view of water resource management by identifying how development of the allocation may positively contribute towards protecting and the improving water environment in line with the Thames River Basin Management Plan (RBMP) and also the Severn RBMP, which covers an area that may be within the sphere of influence of the allocation[291] **and Thames Catchment Management Plans** New web linked Footnote	In response to representation: 1169920/9/AL04/COM The representation advised on improvements to the detailed development requirements for the allocation to take account of Water Framework Directive (WFD) matters. The possible modification responds accordingly to the advice. A Statement of Common Ground has also been prepared and co-signed with the respondent in respect of the possible modification.

Appendix 4 **Allocation 05: Land south and west of Naunton Quarry** **'Water resources' theme**	Revise the Water resources theme for Publication MLP Allocation 05:- A hydrological / hydrogeological impact assessment (HIA) in accordance with EA guidance will be required. As the underlying geology of the allocated units has been classified as a Principal aquifer, attention will need to be given to identifying and quantifying risks associated with all possible minerals related development activities (e.g. working, processing and site restoration) to groundwater resources and for establishing a stringent monitoring regime commencing at least 12-months prior to development, continuing throughout the operational phase and including site restoration and aftercare. In addition, potential hydrological impacts on nearby surface water bodies (up to 3km) will require scrutiny. These includes: - the River Windrush, River Eye, several springs feeding an unnamed tributary of the Windrush; and small ponds and a small lake that are linked to existing and previous mineral working at the existing Naunton Quarry. Although a more definitive sphere of hydrological influences will need to be established through a Water Features Survey. This could identify other and / or more distant surface water bodies that are also worth assessing along with other relevant receptors. Possible cumulative / in-combination hydrological / hydrogeological impacts associated with permitted mineral working and other related activities should also be considered such as proposed restoration and aftercare proposals at the existing Naunton Quarry and also the nearby Tinker's Barn Quarry. The HIA must scrutinise the need to employ mitigation and where necessary provide a strategy for implementation. It must also incorporate a strategic, catchment-scale view of water resource management by identifying how development of the allocated units may positively contribute towards protecting and the improving water environment in line with the Thames River Basin Management Plan (RBMP) and the Severn RBMP, which covers an area that may be within the sphere of influence of the allocation[296] **and Thames Catchment Management Plans** New web linked Footnote	In response to representation: 1169920/10/AL05/COM The representation advised on improvements to the detailed development requirements for the allocation to take account of Water Framework Directive (WFD) matters. The possible modification responds accordingly to the advice. A Statement of Common Ground has also been prepared and co-signed with the respondent in respect of the possible modification.
Appendix 4 **Allocation 06: Land south east of Down Ampney** **'Economic development' theme**	Revise the Economic development theme for Publication MLP Allocation 06:- An Economic Impact Assessment (EcIA) **should be carried out to** ~~will be required~~ to identify potential economic impacts and their significance as a result of aggregate working taking place at land south east of Down Ampney. ~~The~~ **Whether a dedicated** EcIA **is prepared or related information is to be presented as part of another type of assessment, it** must establish whether current local economic conditions are likely to be influenced and the scale and significance of any positive contribution to economic well-being at the local, sub-national and national levels, having taken into account the occurrence of possible negative economic impacts. The EcIA should be based on a balanced and credible analysis of evidence that has been published and / or has been robustly generated to support the proposal. Information concerning the potential impact on local employment both direct and indirectly will be crucial. The prospect of new jobs being generated should be highlighted. Commitments to secure employment and training	In response to representation 808023/29/AL06/SND The representation questioned the requirement to assess economic impacts and considered the exercise to be onerous and unreasonable. The possible modification clarifies that the carrying of a specific standalone economic impact assessments is not mandatory and that the issue can be dealt with within other assessments. It also infers that an initial 'scope' should be completed and that this will dictate how much assessment work will actually need to be undertaken.

	opportunities that will benefit local communities (e.g. provision of local apprenticeships) will be best placed set out within the EcIA. This is in addition to any evidence to show how existing direct and indirect employment will be safeguarded. The possibility that existing non-minerals related local businesses and / or permitted emerging enterprises could be exposed to undue economic risk from aggregate working starting up at land south east of Down Ampney must be explored. The nature of any risks to other businesses, their likely significance and any proposed means of mitigation will need to form part of the EcIA.	
Appendix 4 **Allocation 06: Land South east of Down Ampney** **'Water resources' theme**	Revise the Water resources theme for Publication MLP Allocation 06:- A hydrological / hydrogeological impact assessment in accordance with EA guidance will be required. The superficial deposits of the allocation host a Secondary 'A' shallow aquifer for which little information is known as to its properties. Consequently, a detailed analysis of the existing local groundwater regime will be essential. The assessment must also afford attention to identifying and quantifying groundwater risks associated with all possible minerals-related development activities (e.g. working, processing, site restoration including aftercare) and establish a stringent monitoring regime commencing at least 12-months prior to the commencement of the development, continuing throughout the operational phase and including site restoration and aftercare. The allocation mostly lies within a Source Protection Zone 2 (SPZ2) although a small area falls within a Source Protection Zone 1 (SPZ1). A very specific risk assessment will therefore need to be carried out to consider potential pollution of potable water supplies and other sensitive commercial water supplies **in order to demonstrate there will be no significant environmental impacts and that appropriate protection and / or mitigation and management measures will be put in place. Any landfill or deposit for recovery (DfR) activities will require an appropriate EA permit. Advice from the EA in respect of this matter should be sought at earliest opportunity and parallel tracking of the planning application with the relevant EA permit is strongly encouraged.** Beyond the allocation, potential hydrological impacts on nearby surface water bodies (up to 3km) will require scrutiny. These include: - Marston Meysey Brook; Ampney and Poulton Brooks; River Thames (from the River Churn to River Coln); River Churn (Baunton to Cricklade); Thames & Severn Canal; a number of unnamed tributaries and drains to the River Thames and Ampney Brook; and several ponds and lakes some of which can be traced back to previous and existing mineral workings in the locality. Although a more definitive sphere of hydrological influences will need to be established through a Water Features Survey. This could identify other and / or more distant surface water bodies that are also worth assessing along with other relevant receptors. Possible cumulative / incombination hydrological / hydrogeological impacts associated with nearby permitted mineral workings and other related activities such as restoration and aftercare should also be considered. This includes: - Whetstone Bridge Quarry and Roundhouse Farm Quarry and Eysey Manor Quarry (the final two are located across the administrative	In response to representation: 1169920/11/AL06/USND The representation advised on improvements to the detailed development requirements for the allocation to take account of the Water Framework Directive (WFD); the existence of a Source Protection Zone (SPZ) and potential landfill permitting matters. The possible modification responds accordingly to the advice. A Statement of Common Ground has also been prepared and co-signed with the respondent in respect of the possible modification.

	border in Wiltshire). An early up-to-date survey of the status of nearby mineral workings would be beneficial to this exercise. The HIA must scrutinise the need to employ mitigation and where necessary provide a strategy for implementation. It must also incorporate a strategic, catchment-scale view of water resource management by identifying how development of the allocation may positively contribute towards protecting and the improving water environment in line with the Thames River Basin Management Plan (RBMP)[303] **and Thames Catchment Management Plans** New web linked Footnote	
Appendix 4 **Allocation 06: Land South east of Down Ampney** **'Natural environment' theme**	Revise the natural environment theme for Publication MLP Allocation 06: A comprehensive assessment of the natural environment will be required. This should include those natural assets present in, which rely upon, and / or that are located within the sphere of influence of the allocation. The assessment must identify potential impacts and scrutinise their significance taking into account the different activities / stages of minerals development ((e.g. the preparation of land prior to mineral working, mineral working and processing and subsequent restoration incorporating aftercare). Environmental designations in the locality that will need careful consideration include: - North Meadow and Clattinger Farm SAC; North Meadow SSSI / NNR; and Down Ampney Pits KWS**. In the event that** ~~The re-notification of~~ the Cotswold Water Park SSSI **is re-notified** for its breeding and overwintering bird assemblages, **an assessment** should ~~also~~ be ~~assessed~~ **carried out** to establish whether adverse effects from proposed mineral developments may occur including the disturbance of the important bird assemblages. In addition, any priority habitats and / or priority species, which encompass or have been recorded in, which rely upon, and / or that are located within the sphere of influence of the allocation must be investigated. A further crucial aspect of the assessment will be the provision of sufficient details concerning measures deemed necessary to avoid, reduce, remedy and / or compensate possible unacceptable negative effects. Any scheme of mitigation must also be accompanied by a clear strategy for implementation and be able to demonstrate its deliverability. In totality, the assessment of natural resources must demonstrate how any issues which arising, have been considered in a holistic manner and within a strategic context. In particular it must be clear as to how the nearby: - Ampney Corridor; Eysey; Cleveland Lakes; and Roundhouse Farm Strategic Nature Areas (SNAs) as expressed upon the Gloucestershire Nature Map will not be subject to unacceptable adverse impacts. Where opportunities exist to deliver tangible benefits, due consideration should be given to possible collaborations and coordination with the programme of nature conservation actions identified for the Cotswold Water Park Nature Improvement Area (NIA).	In response to representation: 808023/29/AL06/SND The representation questioned the reference made in the Detailed Development Requirements for the allocation to the re-notification of the Cotswold Water Park SSSI, which has not yet been completed. In response, the possible modification clarifies the current status of the Cotswold Water Park SSSI and the unresolved nature of the re-notification exercise.

Appendix 4 **Allocation 06: Land South east of Down Ampney** **'Historic environment – including archaeology' theme**	Revise the historic environment theme for Publication MLP Allocation 06: A Heritage Statement (HS) is required to establish the presence of heritage assets that could be affected and to assess the nature, extent and importance of their significance and their settings. The HS must also provide a detailed analysis of potential impacts and their envisaged significance associated with all activities related to the working of the allocation. Where the potential for adverse impacts is identified, details of the means of avoiding such impacts or delivering sufficient mitigation to eradicate and / or reduce their significance to an acceptable degree must be included. **This could include limitations on operations including the working of minerals.** The prime focus should be on the preservation of key heritage assets. A proportionately detailed, reasoned justification will be necessary in every instance that harm to, or the potential loss of a heritage asset is envisaged. Information regarding how recording and / or the excavation of heritage assets may also be necessary. The HS must be comprehensive in its coverage by considering both designated and undesignated heritage assets including those of potential archaeological interest. Information contained on the Gloucestershire Historic Environment Record (G-HER) should be interrogated along with the National Heritage List (NHL) produced by English Heritage. The settlement at Bean Hay Copse Scheduled Monument (NH list entry: 1003446) and several grade II listed buildings at Castle Hill Farm (NH list entries: 1341032 and 1304915) are located near to the boundary of the allocation and will likely require some degree of analysis. There are also numerous records of prehistoric and Roman activity in the locality, which will likely require further investigation. In addition, 20th century military activity within the allocation is very evident and should also be carefully assessed[304].	In response to representation: 793641/6/AL06/COM The representation advised that the Detailed Development Requirements for the allocation should note the potential for limitations to occur as a consequence of the risk to nearby heritage assets. The proposed possible modification responds accordingly to the advice.

Appendix 4 **Allocation 06: Land South east of Down Ampney** **'Aerodrome safeguarding' theme**	Revise the aerodrome safeguarding theme for Publication MLP Allocation 06: A Bird Hazard Management Scheme (BHMS) will be required. Advice with respect to its scope and content should be sought at the earliest possible opportunity from Defence Infrastructure Organisation (DIO) Safeguarding. The BHMS should establish the nature, scale and significance of any potential bird hazards associated with all mineral-related activities that support the working of the allocation. Particular~~ly~~ attention will need to be given to the functioning of nearby RAF Fairford due to the location of the allocation within ~~a~~ **statutory safeguarding aerodrome height, technical and** ~~B~~**b**irdstrike **safeguarding consultation** zone**s** and an area where Instrumental Landing Systems (ILS) may need to operate. Although, other nearby aerodromes could also require investigation and may need to be taken into account. **Consultation with the DIO will be required if any equipment is proposed that exceeds 15.2 metres in height above ground level**. Details of the deliverable measures and securable commitments to manage and reduce the frequency and severity of any possible bird hazard risks **to an acceptable level** and **that** ~~the~~ effective monitoring of their success over time, **including post- mineral working, restoration and aftercare, should** ~~will likely~~ form a major element of the BHMS.	In response to representation: 801951/7/AL06/USND The representation raised concern about the potential unsuitability of mineral working within close proximity to RAF Fairford. Particular attention was paid to the risk to aircraft safety from any restoration involving the formation of new water bodies. In response, the possible modification clarifies for prospective applicants bringing forward scheme on the allocation, the existence of various safeguarding zones; the circumstances surrounding formal consultation with the relevant responsible safeguarding body; and the nature and scope of any future assessment to manage risk that may potentially arise.

Appendix 4 **Allocation 06: Land South east of Down Ampney** **'Restoration opportunities and constraints' theme**	Revise the restoration opportunities and constraints theme for Publication MLP Allocation 06: A restoration strategy will be required. Where necessary, individual proposals must give due consideration to their contribution to the delivery of a coherent and combined solution encompassing the entire allocation. Progressive restoration techniques should be applied unless it is demonstrated and justified to be of greater benefit and / or less harmful to apply alternative arrangements. In developing the overall restoration strategy, evidence must be presented to show how integration can be achieved with the existing local environment. Particular attention must be given to continued aviation safeguarding and the avoidance of any increased risk of bird strike at nearby RAF Fairford **and / or other nearby aerodromes**. **This may significantly restrict opportunities to achieve wet restoration, particularly involving the introduction of open water bodies.** Where the public rights of way network has been affected by development of the allocation, attention will need to be given to the integration of acceptable long term resolutions such as the reinstatement or permanent re-routing of affected paths. Opportunities to contribute to the ambitions of the nearby Eysey and Ampney Corridor Strategic Nature Areas (SNAs) and the nature conservation actions for the Cotswold Water Park Nature Improvement Area (NIA) should be taken. Consideration should also be given to the possibility of facilitating other beneficial land uses and / or positively contributing to the future management of land as identified in locally applicable plans and strategies such as the Cotswold District Local Plan and the Cotswold Water Park Master Plan. This could, under the right circumstances, include facilitating new infrastructure that will contribute towards the long-term restoration and possible expansion ambitions of the Thames and Severn Canal network[305]. Furthermore, all proposed restoration solutions must be mindful of climate change and the need to deliver a greater degree of environmental resilience to its envisaged impacts. Under certain conditions this could involve the careful integration of measures to facilitate desirable habitat shifts to take place, which may act as suitable refuges for displaced and / or vulnerable species. An outline aftercare management plan covering at least the 1st five-year post-mineral working period should be incorporated into the overall restoration strategy. This must set out the commitments for carrying out aftercare and for undertaking a more detailed programme up to 12 months prior to the commencement of restoration. It must also contain the direction for future management of any restored areas. A longer timeframe of aftercare may be necessary where nature conservation and informal recreation after-uses are likely to dominate.	In response to representation: 801951/7/AL06/USND The representation raised concern about the potential unsuitability of mineral working within close proximity to RAF Fairford. Particular attention was paid to the risk to aircraft safety from any restoration involving the formation of new water bodies. The possible modification confirms the likelihood that limitations will need to be put in place for mineral restoration (i.e. restricting opportunities for open water bodies) over the allocation.

Appendix 4: **Allocation 07: Land at Lady Lamb Farm, west of Fairford** **'Water resources' theme**	Revise the water resources theme for Publication MLP Allocation 07: A hydrological / hydrogeological impact assessment in accordance with EA guidance will be required. The superficial deposits of the allocation host a Secondary 'A' shallow aquifer for which little information is known as to its properties. Consequently, a detailed analysis of the existing local groundwater regime will be essential. The assessment must also afford attention to identifying and quantifying groundwater risks associated with all possible minerals-related development activities (e.g. working, processing, site restoration including aftercare) and establish a stringent monitoring regime commencing at least 12-months prior to the commencement of the development, continuing throughout the operational phase and including site restoration and aftercare. The allocation also lies within a Source Protection Zone 1 (SPZ1). This will require a very specific risk assessment to be carried out to consider potential pollution of potable water supplies and other sensitive commercial water supplies. Beyond the allocation, possible hydrological impacts on nearby surface water bodies (up to 3km) will require scrutiny. These include: Marston Meysey Brook; Dudgrove Brook; River Coln; a network of drains and tributaries to the River Coln; and several ponds and lakes some of which can be traced back to previous mineral workings in the locality. Although a more definitive sphere of hydrological influences will need to be established through a Water Features Survey. This could identify other and / or more distant surface water bodies that are also worth assessing along with other relevant receptors. The HIA must scrutinise the need to employ mitigation and where necessary provide a strategy for implementation. It must also incorporate a strategic, catchment-scale view of water resource management by identifying how development of the allocation may positively contribute towards protecting and the improving water environment in line with the Thames River Basin Management Plan (RBMP)[310] **and Thames Catchment Management Plans** **New web linked Footnote**	In response to representation: 1169920/12/AL07/COM The representation advised on improvements to the detailed development requirements for the allocation to take account of Water Framework Directive (WFD) matters. The possible modification responds accordingly to the advice. A Statement of Common Ground has also been prepared and co-signed with the respondent in respect of the possible modification.
Appendix 4: **Allocation 07: Land at Lady Lamb Farm, west of Fairford** **'Aerodrome safeguarding' theme**	Revise the aerodrome safeguarding theme for Publication MLP Allocation 07: A Bird Hazard Management Scheme (BHMS) will be required. Advice with respect to its scope and content should ideally be sought at the earliest possible opportunity from Defence Infrastructure Organisation (DIO) Safeguarding. The BHMS should establish the nature, scale and significance of any potential bird hazards associated with all mineral-related activities that support the working of the allocation. Particular~~ly~~ attention will need to be given to the functioning of nearby RAF Fairford due to the location of the allocation within ~~a~~ statutory **safeguarding aerodrome height, technical and b**~~B~~irdstrike **safeguarding consultation** zone**s** and an area where Instrumental Landing Systems (ILS) may need to operate. **Consultation with the DIO will be required if any equipment is proposed that exceeds 15.2 metres in height above ground level.** Although, other nearby aerodromes could require investigation and may need to be taken	In response to representation: 801951/8/AL07/USND The representation raised concern about the potential unsuitability of mineral working within close proximity to RAF Fairford. Particular attention was paid to the risk to aircraft safety from any restoration involving the formation of new water bodies. In response, the possible modification clarifies for prospective applicants bringing forward scheme on the allocation, the existence of various safeguarding zones; the circumstances surrounding formal consultation

	into account. Details of the deliverable measures and securable commitments to manage and reduce the frequency and severity of any possible bird hazard risks **to an acceptable level** and ~~the~~ **that** effective monitoring of their success over time, **including post- mineral working, restoration and aftercare, should** ~~will likely~~ form a major element of the BHMS.	with the relevant responsible safeguarding body; and the nature and scope of any future assessment to manage risk that may potentially arise
Appendix 4: Allocation 07: Land at Lady Lamb Farm, west of Fairford 'Restoration opportunities and constraints' theme	Revise the restoration opportunities and constraints theme for Publication MLP Allocation 07: A restoration strategy will be required. Where necessary, individual proposals must give due consideration to their contribution to the delivery of a coherent and combined solution encompassing the entire allocation. Progressive restoration techniques should be applied unless it can be demonstrated and justified to be of greater benefit and / or less harmful to apply alternative arrangements. In developing the overall restoration strategy, evidence must be presented to show how compatibility and wherever possible, integration can be achieved with the existing local environment. Particular attention must be given to continued aviation safeguarding and the avoidance of increased risk of bird strike at nearby RAF Fairford~~.~~ **and / or other nearby aerodromes. This may significantly restrict opportunities to achieve wet restoration, particularly involving the introduction of open water bodies.** Where the public rights of way network has been affected by development of the allocation, attention will need to be given to the integration of acceptable long term resolutions such as the reinstatement or permanent re-routing of affected paths. Opportunities to contribute to the ambitions of the nearby Bibury and Coln Corridor Strategic Nature Areas (SNAs) and the nature conservation actions for the Cotswold Water Park Nature Improvement Area (NIA) should be taken. Consideration should also be given to the possibility of facilitating other beneficial land uses and / or positively contributing to the future management of land as identified in locally applicable plans and strategies such as the Fairford Neighbourhood Plan, Cotswold District Local Plan and the Cotswold Water Park Master Plan. Furthermore, all proposed restoration solutions must be mindful of climate change and the need to deliver a greater degree of environmental resilience to its envisaged impacts. Under certain conditions this could involve the careful integration of measures to facilitate desirable habitat shifts to take place, which may act as suitable refuges for displaced and / or vulnerable species. An outline aftercare management plan covering at least the 1st five-year post-mineral working period should be incorporated into the overall restoration strategy. This must set out the commitments for the carrying out aftercare and for undertaking a more detailed programme up to 12 months prior to the commencement of restoration. It must also contain the direction for future management of any restored areas. A longer timeframe of aftercare may be necessary where nature conservation and informal recreation after-uses are likely to dominate.	In response to representation: 801951/8/AL07/USND The representation raised concern about the potential unsuitability of mineral working within close proximity to RAF Fairford. Particular attention was paid to the risk to aircraft safety from any restoration involving the formation of new water bodies. The possible modification confirms the likelihood that limitations will need to be put in place for mineral restoration (i.e. restricting opportunities for open water bodies) over the allocation.

New appendix	Insert a new appendix into the Publication MLP that contains a schedule of the existing 'saved' policies that would be replaced. The schedule is introduced earlier in this addendum to the supporting evidence paper.	To ensure that the MLP meets the requirements of Regulation 8(5) of the Town and Country Planning (Local Planning) (England) Regulations 2012[45]

[45] Regulation 8(5) of Town and Country Planning (Local Planning) (England) Regulations 2012 states; *"Where a local plan contains a policy that is intended to supersede another policy in the adopted development plan, it must state that fact and identify the superseded policy"*.