



Bournemouth, Christchurch, Poole and Dorset Mineral Sites Plan
(previously the Bournemouth, Dorset and Poole Mineral Sites Plan)

Pre-Submission Consultation Draft - incorporating proposed
modifications

Sustainability Appraisal

May 2019

Table of Contents

1.	Introduction.....	7
	Local Government Reorganisation.....	7
	Bournemouth, Dorset and Poole Mineral Sites Plan	7
2.	The Appraisal Methodology.....	9
	What is the SA/SEA? Why does it need to be done?	9
	Stages to the SA/SEA.....	9
	Table 1: SA/SEA Stages	9
	Previous Consultation	10
	The Minerals Strategy 2014 – Sustainability Appraisal.....	10
3.	Background to the SA Report.....	12
	Requirement for the Sustainability Appraisal (SA).....	12
	Stages of the SA	12
	Table 2: Stages of the SA Report.....	12
	Table 2: Stages of the SA Report.....	12
	Figure 1: SA and SEA and Plan Preparation Stages.....	14
	Compliance with the SEA Directive / Regulations.....	15
4.	Links to other policies, plans and programmes.....	16
	Review of relevant plans and programmes.....	16
	Table 3: Key Sustainability Issues/Messages.....	16
	Table 3: Key Sustainability Issues/Messages.....	16
5.	Developing the SA Framework.....	23
	Scoping the Sustainability Issues.....	23
	Table 4 - SA Framework - Environmental Objectives/Indicators	24
	Table 5 - SA Framework - Economic Objectives/Indicators.....	26
	Table 6 - SA Framework - Social Objectives and Indicators	27
	Sustainability Objectives and Site Assessment Criteria.....	28
	Table 7 - Site Selection Criteria and relationship to SEA Directive Issues.....	29
	Table 7 - Site Selection Criteria and relationship to SEA Directive Issues	29
	Table 8 - Relationship between SEA Directive Issues, Sustainability Appraisal Objectives and Site Selection Criteria.....	32
6.	Developing and Refining Options and Assessing Effects	37
	Introduction	37
	Relationship between Minerals Strategy and Mineral Sites Plan.....	37
	Options Appraised in the Mineral Sites Plan Sustainability Appraisal.....	37
	Crushed rock.....	38

	Table 9 - Sustainability appraisal of options for a supply of crushed rock - outside of Portland.....	40
	Purbeck Stone	47
	Sand and gravel.....	47
	Table 9a - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate.....	48
	Establishing Aggregate Demand	58
	Including an Aggregates Area of Search	59
7.	Policy Appraisal.....	60
	Background	60
	Table 10a - Sustainability appraisal of Policies MS-1,MS-3, MS-4, MS-5 , MS-6 5 and MS7 6.66	
	Table 10b - Sustainability appraisal of Policies MS-2, MS- 8 7 and MS- 9 8.....	77
8.	Appraisal of Nominated Sites.....	86
	Background	86
	The Site Appraisal Process.....	86
	Figure 2: Examples of completed site assessment criteria	87
	Secondary, cumulative and synergistic effects	88
	Examples of cumulative, synergistic and secondary.....	88
	Clusters of sites.....	91
	Figure 3 – District/Borough Allocations with Minerals and Waste Proposed Allocations	92
	Figure 4: Mineral Site Clusters.....	96
	Cluster 1 – Other building stone sites.....	97
	Cluster 2 – C7 Wareham to A35 – Ball Clay and Aggregates.....	97
	Table 11 – Traffic Movements along the C7.....	97
	Cluster 3 – Hurn Court Farm and Roeshot – Aggregates	98
	Cluster 4 – Station Road, Hurst Farm and Woodsford – Aggregates	99
	Cluster 5 – Cluster 4 Plus AS06 Great Plantation on the C80 Puddletown Road	100
	Cluster 6 – Purbeck Stone sites	101
	Recycled aggregate.....	101
9.	Health Impact Assessment	102
	Introduction	102
	Appraisal.....	102
	Consultation.....	102
10.	Equalities Impact Assessment	104
	Introduction	104
	Who will it impact upon?.....	104
	Potential Impacts	104
	Table 12: Does or could the service, strategy, policy, project or change have an impact upon the following:	104

	Table 13: Does this have any impact on the workforce in relation to the following:	105
	Comment.....	105
	Consultation.....	106
	Access to Plan Sites.....	106
	Conclusion	107
11.	Mitigation	108
	Mitigation Proposals.....	108
12.	Monitoring	109
13.	Sites – Assessed, Permitted and Withdrawn.....	110
	Table 14: Stage 2 Appraisals for Sites Proposed for Allocation – see Appendix A	110
	Table 15: Stage 2 Appraisals for Sites Not Proposed for Allocation but not Withdrawn or Permitted – see Appendix B.....	111
	Table 16: Sites Withdrawn (or not being promoted) or Permitted – see Appendix C	111
14.	Appendix A – Proposed Site Allocations.....	113
	Assessing the Sites	113
	Aggregates: AS06 Great Plantation Assessment Updated November 2018.....	114
	Aggregates: AS12 Philliol’s Farm.....	131
	Aggregates: AS13 Roeshot Assessment (February 2019).....	148
	Aggregates: AS15 Tatchell’s Assessment (February 2019).....	161
	Aggregates: AS19 Woodsford NE Extension (February 2019).....	171
	Aggregates: AS25 Station Road, Moreton (February 2019).....	183
	Aggregates: AS26 Hurst Farm, Moreton (February 2019).....	198
	Aggregates: AS27 Land at Horton Heath, Horton Road (February 2019).....	213
	Crushed Rock: PK16 Swanworth Quarry Extension Assessment (February 2019).....	226
	Recycled Aggregates: RA01 Whites Pit, Poole (February 2019).....	245
	Ball Clay: BC04 Trigon Hill Extension (February 2019).....	253
	Purbeck Stone : PK02 Blacklands Quarry, Acton Assessment (February 2019).....	268
	Purbeck Stone : PK10 Southard Quarry, near Swanage Assessment (February 2019).....	280
	Purbeck Stone: PK17 Home Field, Langton Matravers Assessment (February 2018).....	289
	Purbeck Stone: PK 18 Extension to Quarry 4, Acton Assessment (February 2019).....	301
	Purbeck Stone: PK19 Broadmead Field, Gallows Gore, Worth Matravers (February 2019)	312
	Other Building Stone: BS02 Marnhull Quarry, Whiteways Lane, (February 2019).....	325
	Other Building Stone: BS04 Frogden Quarry, north-east of Sherborne (February 2019).....	334
	Other Building Stone: BS05 Whithill Quarry Assessment (February 2019).....	344
	Appendix B: Sites Not Being Taken Forward.....	354
	Sand and Gravel: AS08 Horton Heath (west) and Redman’s Hill, Horton Road(east) Now referred to as AS27 (see above)	354
	Purbeck Stone: PK08 Quarr Farm, Harman’s Cross	366
	Appendix C: Sites Not Being Taken Forward – Withdrawn or Permitted.....	375

Aggregates: AS01 Binnegar	375
Aggregates: AS09 Hurn Court Farm	386
Aggregates: AS10 Moreton Plantation	400
Aggregates: AS11 Parley Court, West Parley	413
Aggregates: AS14 Sturminster Marshall.....	426
Aggregates: AS20 Came Home Farm.....	437
Aggregates: AS22 Trigon Hill Extension	448
Aggregates: AS23 Gore Heath, Sandford	458
Aggregates: AS24 Purple Haze South.....	470
Aggregates: AS28 – Gallows’ Hill A&B	481
Purbeck Stone: PK15 Downs Quarry Extension.....	497
Other Building Stone: BS01 Manor Farm Quarry.....	506
Ball Clay: BC05 Doreys – Holme Heath.....	515
Portland Stone: PS01 Bower’s Mine, Weston, Portland.....	526
Portland Stone: PS02 Perryfield Quarry Extension, Portland	534
Purbeck Stone: PK11 St Aldhelms Quarry Extension, Purbeck	542
Purbeck Stone: PK20 Crack Lane, Langton Matravers.....	543
Purbeck Stone: PK 21 Gallows’ Gore, Langton Matravers.....	553
Appendix D: Considering and Selecting Site Alternatives	565
Introduction	565
Sand and Gravel.....	565
Crushed Rock.....	566
Ball Clay	567
Purbeck Stone	567
Other Building Stone	568
Appendix E: Swanworth Quarry - Further Information.....	575
Exceptional Circumstances Test 1 – Need and Economy	575
Swanworth Contribution to Dorset Crushed Rock Supplies.....	575
Table 17 - Swanworth Quarry Sales Split	576
Economics	576
Employment	577
Exceptional Circumstances Test 2 – Alternatives	577
Limestone	577
Alternative Aggregate – Sand and Gravel.....	579
Swanworth Product Range	579
Exceptional Circumstances Test 3 – Environment	580
Landscape.....	580
Ecology	581

Water Environment.....	581
Cultural Heritage.....	582
Highways	582

1. Introduction

- 1.1. This report constitutes the Strategic Environmental Assessment (SEA) and Sustainability Appraisal (SA) for the Pre-Submission Consultation of the Bournemouth, Dorset and Poole Mineral Sites Plan.
- 1.2. The main aim of the Sustainability Appraisal/Strategic Environmental Assessment (SA/SEA) is to promote sustainable development through the integration of social, environmental and economic considerations into the preparation of a new Local Plan. This document incorporates the requirements of a SEA for the Local Plan as required by the Planning and Compulsory Purchase Act 2004 and the European Directive on SEA (2001).

Local Government Reorganisation

- 1.3. Prior to 1 April 2019, Bournemouth and Poole as unitary authorities were the mineral and waste planning authorities for their own areas. The rest of Dorset operated as a two-tier planning authority system, comprising Dorset County Council and six Districts/Boroughs. The County Council was the mineral and waste planning authority.
- 1.4. Since 1 April 2019 the existing local authority structure has changed; the previous structure has been replaced with two unitary authorities, Bournemouth, Christchurch and Poole Council and Dorset Council, the latter comprising the former County Council and all District/Borough councils apart from Christchurch. These two new Councils are both minerals and waste planning authorities and local planning authorities, and the 2014 Minerals Strategy and the Mineral Sites Plan cover the area of these two Councils.
- 1.5. Throughout this SA references to Bournemouth Borough Council, Dorset County Council and the Borough of Poole (Bournemouth, Dorset and Poole) should be taken as applying to this new structure of local government.
- 1.6. The Bournemouth, Dorset and Poole Mineral Sites Plan is now known as the **Bournemouth, Christchurch, Poole and Dorset Mineral Sites Plan**. Throughout this document, references to the Bournemouth, Dorset and Poole Mineral Sites Plan should be read as the Bournemouth, Christchurch, Poole and Dorset Mineral Sites Plan.

Bournemouth, Dorset and Poole Mineral Sites Plan

- 1.7. ~~Bournemouth, Christchurch and Poole (BCP) Council and Dorset Council~~ ~~Dorset County Council, Bournemouth Borough Council and Poole Council~~ are Mineral Planning Authorities (MPAs), the statutory planning authority for all minerals matters within their administrative areas. Under the Planning and Compulsory Purchase Act (PCPA) it was required to develop a Minerals and Waste Development Framework comprising a set of documents that would guide minerals and waste planning in their areas. This requirement was modified by the Localism Act of 2011 which removed the need to prepare a specific Framework but which maintains the need to provide a Minerals and Waste Local Plan.
- 1.8. The Minerals Local Plan for Bournemouth, Dorset and Poole will consist of two inter-linked documents, the Minerals Strategy (including development management policies - adopted 2014) and the Mineral Sites Plan, currently in preparation, identifying the spatial locations required to deliver the Minerals Strategy. Collectively these documents will:
 - Set out the strategy for mineral provision in Bournemouth, Dorset and Poole
 - Identify where minerals could be worked in Bournemouth, Dorset and Poole in order to meet society's needs, and
 - Show how this can be achieved without compromising the unique environment of Bournemouth, Dorset and Poole.
- 1.9. The Mineral Sites Plan (MSP) identifies and designates the specific sites and areas required to deliver the component mineral strategies of the Minerals Strategy. It also includes additional policies to facilitate the supply of minerals and restoration of sites, including an aggregates Area of Search, a Puddletown Road site management and restoration policy and development of the Minerals Strategy approach to safeguarding of mineral sites and infrastructure.

1.10. The following work has been undertaken as part of the preparation of the MSP:

- The Mineral Sites Allocation Document (MSAD) was published in 2008, setting out the range of site nominations (site options) received in response to a 'call for sites' issued in 2006/7.
- Work on the MSAD was then put on hold in order to focus resources on the Minerals Strategy document. Work on the MSAD (renamed the Mineral Sites Plan) resumed in Summer 2012. Information previously received was reviewed and a second call for sites 'refresh' exercise was undertaken in August 2012 in order to update the list of sites to be considered as potential options for allocation.
- The Mineral Sites Plan Consultation Document 2013-2014 was published for consultation from December 2013 to February 2014. Given the break in the process to prepare the Minerals Strategy, this document again simply set out site options, derived from the MSAD, and the renewed call for sites. The Mineral Planning Authority (MPA) did not offer any views on which sites were considered more favourable. A final call for sites was issued in April 2014, to seek to ensure that as many site options as possible were put forward for consideration.
- In Summer 2015, the Draft Mineral Sites Plan was published for consultation. This draft version of the MSP set out the MPA's preferred options for sites. It also included proposals for an aggregates Area of Search, the Puddletown Road Policy Area and safeguarding of existing minerals sites. Supporting documents, including a Draft Sustainability Appraisal and Habitat Regulations Appraisal, were also prepared and consulted on.
- Another consultation, the Draft MSP Update 2016, was undertaken between February and March 2017. This was both an update of some aspects of the MSP and consultation on additional site options. Again, a Draft Sustainability Appraisal and Habitat Regulations Appraisal were prepared and consulted on. The outcomes of these consultations together with the responses to the calls for sites have informed the final list of allocated sites and other proposals in this Pre-Submission Draft MSP document.
- Following appointment of an independent planning Inspector, the MSP examination hearing sessions took place in September/October 2018. During the examination process a series of modifications for the MSP were suggested to ensure the Plan was sound. This document includes a sustainability appraisal of the proposed modifications. HRA has also been undertaken on the proposed modifications. All of the site nominations, as options, together with other options and policies, have been assessed against a series of sustainability objectives to identify potential impacts and the appropriate mitigation for these impacts. Only policies and site allocations that are proposed to be modified have been re-assessed at this stage.
- During the hearing two sites at Horton Heath near Three Legged Cross were discussed as 'Omission Sites. One of these sites is heavily constrained ecologically and is considered not suitable for development. The Inspector did however ask the WPA to re-consider the merits of the other site, AS27, as an allocation. Further work, including SA, was undertaken to assess the site and public consultation took place in December and January 2019. The SA has been added to this report, see Appendix A.
- During the examination into the MSP concern was shown that the sustainability appraisal had not adequately considered the cumulative impacts of the MSP in particular related to the clusters of site allocations. As a result, further work has been undertaken to consider the cumulative impact of site allocations. This is included within a separate report that should be read alongside this report.

2. The Appraisal Methodology

What is the SA/SEA? Why does it need to be done?

- 2.1. The purpose of Sustainability Appraisal (SA) is to ensure that sustainability issues are considered during the preparation of plans. The SA is an iterative process which identifies the likely effects of the Mineral Sites Plan (MSP), and the extent to which the MSP achieves economic, environmental and social objectives.
- 2.2. The SA must also incorporate the requirements of the European Directive 2001/42/EC on the 'assessment of the effects of certain plans and programmes on the environment'¹. This is commonly referred to as the Strategic Environmental Assessment or 'SEA' Directive. This was transposed into UK law by the Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations). Under these requirements, plans that set out the framework for future development consent of projects must be subject to an environmental assessment to determine if the plan, in this case the Minerals Sites Plan will have any significant effects on the environment. This context is reiterated in paragraph 32 of the 2019 National Planning Policy Framework (NPPF)².

"Local plans and spatial development strategies should be informed throughout their preparation by a sustainability appraisal that meets the relevant legal requirements¹⁷. This should demonstrate how the plan has addressed relevant economic, social and environmental objectives (including opportunities for net gains). Significant adverse impacts on these objectives should be avoided and, wherever possible, alternative options which reduce or eliminate such impacts should be pursued. Where significant adverse impacts are unavoidable, suitable mitigation measures should be proposed (or, where this is not possible, compensatory measures should be considered)."

- 2.3. Further to the NPPF, the Planning and Compulsory Purchase Act 2004³ requires an SA and SEA to be carried out for Local Plans. Both of these requirements can be carried out in one appraisal process. In order to avoid any confusion, the reference to SA throughout this document will refer to both the SA and the SEA.

Stages to the SA/SEA

- 2.4. The SA is made up of a series of stages (A to E) which are detailed in the table below.

Table 1: SA/SEA Stages

Stage	Actions
Stage A	Setting the context and objectives, establishing the baseline and deciding the scope
Stage B	Developing and refining the options
Stage C	Appraising the effects of the Plan
Stage D	Consultation
Stage E	Monitoring the significant effects of implementing the Plan

¹ European Parliament. (2001) "The Assessment of the Effects of Certain Plans and Programmes on the Environment", Directive 2001/42/EC of the European Parliament, Luxembourg, 2001 http://europa.eu/legislation_summaries/environment/general_provisions/l28036_en.htm

² National Planning Policy Framework. February 2019: Ministry of Housing, Communities and Local Government

³ Planning and Compulsory Purchase Act 2004: <http://www.legislation.gov.uk/ukpga/2004/5/contents>

- 2.5. This report has been updated to reflect the modifications proposed to the Pre-Submission Draft Mineral Sites Plan and contains the following:
- An outline of the contents, the methodology and description of the SA/SEA process and the specific SA/SEA tasks undertaken
 - A review of other plans and programmes and their relationship to Bournemouth, Dorset and Poole (Sustainability Appraisal Scoping Report – see: <https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/dorset-county-council/sustainability-appraisal-minerals-and-waste.aspx>)
 - A description of the environmental and sustainability context (known as the baseline information) (Sustainability Appraisal Scoping Report – see: <https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/dorset-county-council/sustainability-appraisal-minerals-and-waste.aspx>)
 - A summary of key sustainability issues
 - The SA/SEA Framework which sets out the SA/SEA objectives for assessing the Minerals and Waste Local Plan
 - A review of the options considered, and the preferred options selected
 - An appraisal of the proposed modifications to the Mineral Sites Plan
- 2.6. This SA will be made available during the consultation of the modifications which is due to take place during May/June 2019.

Previous Consultation

- 2.7. Public involvement through consultation is a key element of the SA. During the development of the SA to date there have been several stages of consultation, both formal and informal and involving both the Scoping Report and the Draft Sustainability Appraisal itself.
- 2.8. The Scoping Report established the scope of the sustainability appraisal of the Development Plan Documents being prepared by Dorset, Bournemouth and Poole Councils. This included the range of information to be collected to form the evidence baseline, the range of other policy documents relevant to and impacting on minerals planning in Dorset and the coverage of sustainability objectives required to properly assess the sustainability and potential impacts of the emerging Mineral Sites Plan.
- 2.9. Three Scoping Reports have been produced. The original report was compiled and consulted on during 2006/2007. It was reviewed and updated during 2009/2010 and again in 2015 in order to ensure that the evidence base and sustainability objectives properly reflected current policy and issues relevant to minerals planning in Dorset. In each case the Scoping Report was consulted on. The Sustainability Appraisal Scoping Report can be seen at:

<https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/dorset-county-council/sustainability-appraisal-minerals-and-waste.aspx>

The Minerals Strategy 2014 – Sustainability Appraisal

- 2.10. A Sustainability Appraisal was prepared in support of the 2014 Minerals Strategy. It assessed all relevant aspects of that Plan, including Vision, Objectives, Spatial Strategy, Options for provision of mineral and policies. It was submitted as evidence as part of the Examination of the Minerals Strategy in 2013⁴.
- 2.11. The Bournemouth, Dorset and Poole Mineral Sites Plan supports and is an integral part of the 2014 Minerals Strategy. It shares the Vision, Objectives, spatial strategies and policies of the Minerals Strategy, and is intended to identify the sites and areas to deliver those strategies and policies. The

⁴ See: <https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/dorset-county-council/pdfs/sustainability-report-may-2014.pdf>

sustainability appraisal of the Mineral Sites Plan does not re-visit the higher-level issues covered in this document (e.g. Vision, Objectives, how much mineral to provide for, spatial strategies). It focuses on the proposals of the Mineral Sites Plan, particularly appraisal of options for mineral site allocation.

- 2.12. Draft versions of the Sustainability Appraisal of the DMSP were prepared and consulted on in 2015 and 2016. These can be seen here: <https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/dorset-county-council/minerals-planning-policy/mineral-strategy/preparing-the-mineral-sites-plan.aspx> Further information is available on request - contact the Mineral Planning Authority if further information is required.
- 2.13. Under the Town and Country Planning (Local Development) England (Amendment) Regulations 2012 there is no formal requirement for a Preferred Options stage and the SA is now only required under Section 20 to be published for consultation when the proposed submission documents are published for consultation. However, the SA/SEA forms an important part of the site selection process, and therefore draft versions of the Sustainability Appraisal have been published as part of the two most recent consultations. Again, this version of the SA has been updated to reflect the modifications proposed to the Pre-Submission Draft Mineral Sites Plan. It will be made available during the consultation on the modifications.

3. Background to the SA Report

Requirement for the Sustainability Appraisal (SA)

3.1. The Planning and Compulsory Purchase Act 2004 requires a Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) to be carried out for all strategic planning documents. The SA and the SEA requirements can be carried out in one appraisal process. Throughout this document, reference to the SA refers to both the SA and the SEA process.

Stages of the SA

3.2. The approach for carrying out the SA of the Draft Mineral Sites Plan is based on the following guidance:

- A Practical Guide to the SEA Directive (2005), ODPM,
- Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents (2005), ODPM
- Planning Practice Guidance, Strategic Environmental Assessment and Sustainability Appraisal [online] (last updated 2015), DCLG

3.3. Undertaken in parallel with plan preparation, the SA is an iterative process. The sustainability appraisal is made up of a series of stages (Stages A to E).

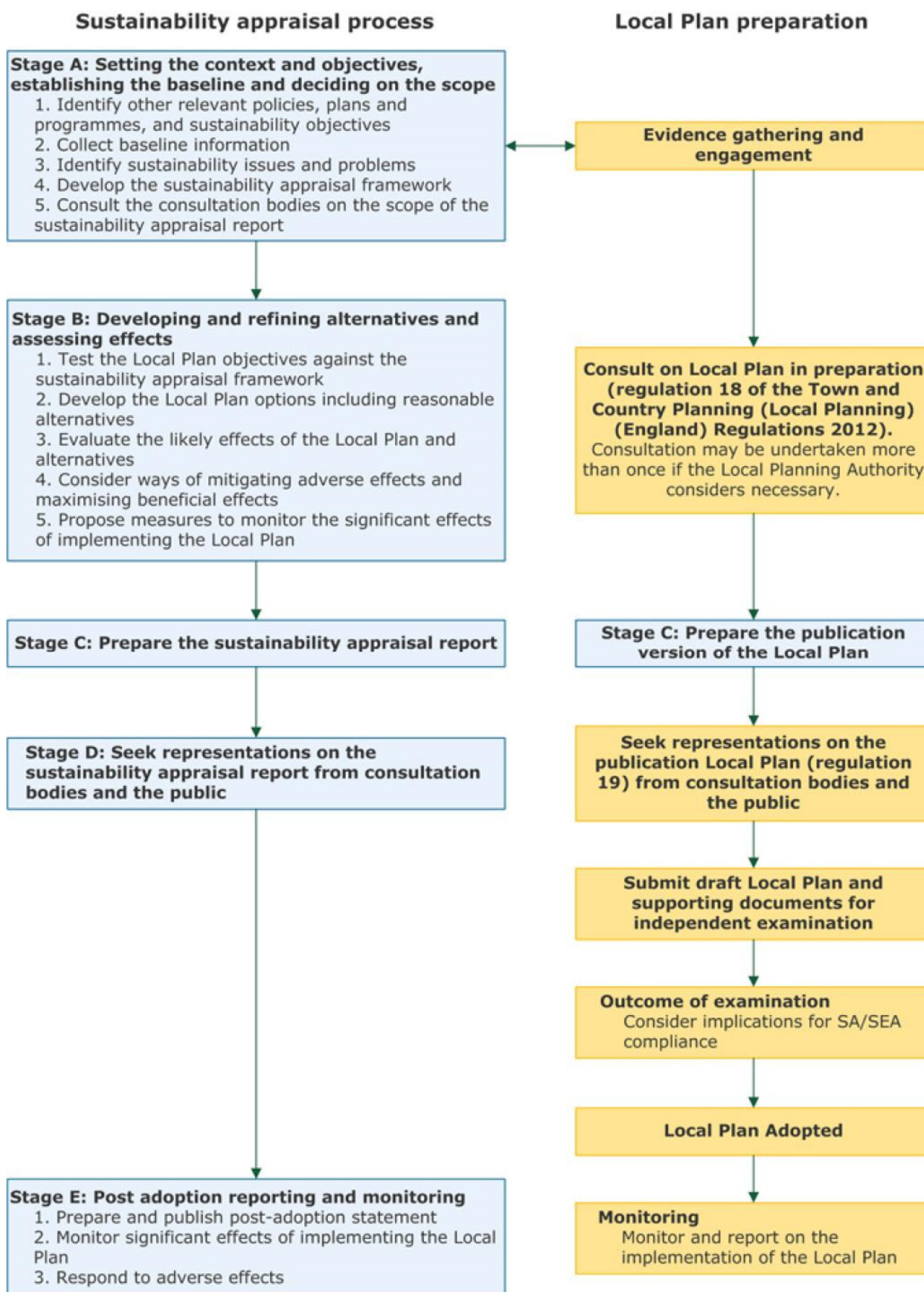
Table 2: Stages of the SA Report

Table 2: Stages of the SA Report		
Plan Stage	SA/SEA Stage	
Pre-Production COMPLETE	A – Scoping	Setting the context and objectives, establishing the baseline and deciding on the scope.
	A1	Identify other relevant policies, plans and programmes, and sustainability objectives
	A2	Collect baseline information
	A3	Identify sustainability issues and problems
	A4	Develop the SA framework
	A5	Consult on the scope of the SA
Production and Publication	B	Developing and refining options and assessing effects
	B1	Test the Plan objectives against the SA framework
	B2	Develop the Plan options
	B3	Predict the effects of the Plan
	B4	Evaluate the effects of the Plan
	B5	Consider mitigation measures and ways to maximise beneficial effects
	B6	Propose measures to monitor the significant effects of implementing the Plan
	C	Preparing the SA Report

Table 2: Stages of the SA Report		
	D	Consulting on the Draft Plan and SA Report
	D1	Public participation on the draft Plan and SA Report
	D2 (i)	Appraise significant changes
Submission and Examination	D2 (ii)	Appraise significant changes resulting from representations
	D3	Make decisions and provide information
Adoption and Monitoring	E	Monitoring the significant effects of implementing the Plan
	E1	Finalise aims and methods for monitoring
	E2	Respond to adverse effects

- 3.4. The first stage (Stage A) is the production of the Scoping Report This is where the scope and overall level of detail of the SA is set out. As noted above, three Scoping Reports have been produced. The original report was compiled and consulted on during 2006/2007. It was reviewed and updated during 2009/2010 and again in 2015 in order to ensure that the evidence base and sustainability objectives properly reflected current policy and issues relevant to minerals planning in Dorset. In all cases the scoping report was consulted on.
- 3.5. The Scoping Report sets out the sustainability objectives and these will then be used to assess the Plan. The next stage (Stage B) is the stage where the options are developed and refined and the effects of the options are assessed. This stage is an iterative process where the options are tested against the SA objectives to predict and evaluate the effects of options in the Local Plan. Mitigation measures are identified where necessary and recommendations to changes of the options are made and the revised options reassessed where necessary.
- 3.6. The findings of Stage B are pulled together to produce the SA report (Stage C).

Figure 1: SA and SEA and Plan Preparation Stages



3.7. The SA Scoping Report can be seen at: <https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/dorset-county-council/sustainability-appraisal-minerals-and-waste.aspx>

Compliance with the SEA Directive / Regulations

- 3.8. The requirement to carry out a SA also incorporates the provision of the European Directive 2001/42/EC to include a SEA. The distinction between the two is that the SEA primarily focuses on environmental effects, whereas the SA expands this remit to incorporate economic and social sustainability. In line with the requirements of the European Directive, the SA report seeks to identify only likely significant effects of the Plan.

4. Links to other policies, plans and programmes

4.1. The Mineral Planning Authority must take account of relationships between the Mineral Sites Plan and other relevant policies, plans, programmes and sustainability objectives. This is in addition to the need to take into account environmental protection objectives established at international, European and national levels. All of these may influence the options to be considered in the preparation of the Local Plan. By reviewing these, relationship inconsistencies and constraints can be addressed and potential synergies can be exploited.

Review of relevant plans and programmes

4.2. Stage A1 of the SA process involves establishing the context in which the Document is being prepared, namely the other plans and programmes and sustainability objectives that could influence its content and the opportunities and challenges they present. The SEA Directive specifically requires environmental objectives established at international, European Community or national levels to be taken into account in developing a Plan.

4.3. However, in order to facilitate a comprehensive approach, guidance on SA recommends that this should be widened to consider how the Plan can support the full range of other plans, policies and programmes that already exist, including at the regional and local levels, taking into account their economic and social as well as environmental objectives.

4.4. A review of relevant plans and programmes that may influence the Mineral Sites Plan and vice versa was undertaken. This detailed review is contained in the SA Scoping Report as a series of twelve separate topic papers. These include the topics identified in the SEA Directive, along with social and economic topics to fulfil the requirements of the sustainability appraisal guidance and the Planning and Compulsory Purchase Act 2004.

4.5. The Scoping Report published a list of relevant plans, policies and programmes and contained a detailed assessment of these plans and the key messages and implications of them for the Mineral Sites Plan. The Scoping Report, with the list of documents, can be seen here: Sustainability Appraisal Scoping Report – see <https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/dorset-county-council/sustainability-appraisal-minerals-and-waste.aspx>

4.6. A number of key messages emerged from this review of policies, plans and programmes. These are set out in Table 4 below, grouped by topics.

Table 3: Key Sustainability Issues/Messages

Table 3: Key Sustainability Issues/Messages	
Minerals	<ul style="list-style-type: none"> • Striking a balance between meeting current needs for mineral resources (social progress and economic growth) while ensuring they are also conserved for the future generations (prudent use of natural resources and environmental protection). • Some ball clay reserves are located within the international designated areas. • Sterilisation of mineral resources by other forms of development. • The provision for the supply of sand and gravel at the appropriate rate if any shortfall occurs in the provision of the required supply in neighbouring authorities. This may require joint working with neighbouring authorities to secure the required supply of sand and gravel. • Selection of sites and formulation of policy to minimise or remove all negative impacts. • The need to safeguard mineral resources, including through increased use of secondary and recycled materials. • Ensuring Dorset makes an appropriate and justified contribution to local and national requirements - however this must take into account the quality of Dorset's environment and the implication of international and national biodiversity, landscape and cultural heritage designations.

Table 3: Key Sustainability Issues/Messages

	<ul style="list-style-type: none"> • The need to integrate minerals and waste planning (including waste infrastructure) to promote more sustainable development. • Protection and, where possible, enhancement of the environment both during mineral working and through high quality restoration and after-care. • Address past impacts of mineral operations. • Promote more sustainable transportation of minerals by rail and water and reduced mileage. • Encourage movement of aggregates by rail and/or water.
Climate Change	<ul style="list-style-type: none"> • Hotter drier summers and drought, increasing demand for water potentially effecting availability for minerals operations, also affecting building temperatures and demand for cooling. • Effects to ground and surface water levels and quality affecting vulnerability of these resources as well as abstraction Increased risk of flooding, creating a greater need for flood and surface water management and higher risk of surface and ground water pollution, as well as disruption to operations. • Increased windiness, potential affecting waste management on exposed landfill sites or changes to dust and pollution control within some minerals operations. • Increasing risk of coastal flooding sea level rise a consideration for the location, longevity and viability of minerals operations near the coast, requiring further vulnerability assessments. • Extreme events increasing disruption to supply chains, infrastructure and transport
Biodiversity and Geodiversity	<ul style="list-style-type: none"> • The provision of sites for waste management and/or mineral extraction has the potential to impact on Dorset’s biodiversity, flora and fauna, and geodiversity. • A strategic approach should be taken to the conservation and enhancement of biodiversity and geology with the Waste Plan and Mineral Sites Plan being informed by the larger functional scales of ecosystems, catchments and landscapes. • The precautionary principle should be applied to biodiversity issues and geodiversity features, but as far as possible policies should also be based upon up-to-date information. • The Waste Plan and Mineral Sites Plan must respect the primacy of European Natura 2000 sites both within and adjoining Dorset and comply with the requirements of Appropriate Assessment under the Habitats Directive. • The location of sand and ball clay quarries, some of which have been or are being restored through landfill of household waste, in close proximity to SACs and SPAs (mainly the Dorset Heathlands) has the potential for continued conflict between the conservation of important habitats and waste disposal. • Appropriate regard should be attached to international, national and locally important habitats and species, as well as the wider environment. Both the CRoW Act and NERC Act place duties on local authorities with respect to the conservation of biodiversity. • Net biodiversity gains should be sought through the restoration of waste sites, where appropriate, positive management and the creation of new habitats. • Conservation of geodiversity should be given significant weight and its interconnection with the biodiversity conservation taken into account. • Restoration by inert landfill of quarries may put geodiversity at risk through the loss or covering of exposures. It may also put biodiversity at risk where re-colonisation has

Table 3: Key Sustainability Issues/Messages

	<p>taken place.</p> <ul style="list-style-type: none"> • Geodiversity gains should be sought through the creation of geological exposures and the positive management and afteruse of minerals and waste sites where appropriate. • Dorset has a rich geological resource, recognised by a range of designations, which should be protected and, where possible, enhanced. • The significance of the World Heritage Site should be respected. • The Waste Plan and Mineral Sites Plan should promote the geodiversity objectives of the World Heritage Site Management Plan and Local Geodiversity Action Plan.
Water	<ul style="list-style-type: none"> • Run-off water from sites may pollute water courses and soil. • Water and soil pollution can be controlled through careful design and location of site planning, infrastructure, management, restoration, mitigation and compensation with appropriate conditions and considerations. • If waste facilities or mineral extraction sites are in close proximity to the boundaries of the neighbouring authorities, their impact on water resources in the neighbouring areas may be an issue. • Waste facilities and mineral working must be carefully designed not to cause risk of increased flooding and to ensure that facilities are not at risk of flooding. • Proposed minerals developments must ensure they do not impede drainage in any way, and mineral processing plant is not at risk of flood damage. Opportunities to improve drainage, or minimise flood risk, should be taken where possible. • In some instances, surface water or groundwater may need to be abstracted from mineral development sites. This causes changes in groundwater level through discharging water from extraction sites. Mineral extraction sites may therefore cause changes in groundwater level. • Discharge of water into surface water courses from the site may cause flooding depending on the volume of water discharged. There may also be issues of silt deposition or turbidity. • Proposed developments should not result in a net increase in nitrogen load to Poole Harbour. This is particularly relevant to proposals for sewage treatment works. • Where proposed mineral sites can take land out of agricultural use this could provide a benefit in terms of reducing nitrate input into the harbour catchment.
Historic Environment	<ul style="list-style-type: none"> • An appropriate level of protection must be provided to designated historic assets, including those which are locally distinctive, valued and important. • The contribution of historic and cultural heritage (including minerals heritage) to the distinctiveness of Dorset’s landscapes must be recognised. • Quarrying (particularly of building stone) is an integral part of Dorset’s cultural heritage and industrial archaeology, which is very closely linked to the landscape quality in some parts of the county. • Heritage should be taken into account in the siting, design, management and restoration, where relevant, of waste and minerals sites. • Access to and enjoyment and understanding of the historic environment should be facilitated where possible. • Where waste or minerals development is proposed, it is essential that the impact on the historic environment is assessed and evaluated fully before a planning decision is made. Desk-based assessments and evaluation using various methods of survey and excavation

Table 3: Key Sustainability Issues/Messages

	<p>of trial trenches are usually needed to provide sufficient information on the impact of extraction on the historic environment. Based on the results of these exercises, the appropriate mitigation for this impact can be determined. Particularly for designated sites such as Listed Buildings and Scheduled Monuments, not only direct physical impacts need to be considered, but also the impacts on the settings of these sites.</p> <ul style="list-style-type: none"> • Many scheduled monuments lie in close proximity to current quarries and on mineral deposits. There is potential for such sites to be used as landfill in certain circumstances. There may be conflict therefore between the presence of scheduled monuments and potential landfill sites. • The use of quarries as landfill sites lengthens the time for restoration and therefore may increase impacts on the historic landscape or on the settings of historic assets. • The management of change in the historic landscape and the recording of its dynamic nature is important. • In addition, waste development or mineral extraction can fund additional (or directly carry out through restoration) works to benefit historic landscapes and features
Landscape	<ul style="list-style-type: none"> • Many mineral deposits and therefore current or potential landfill sites in Dorset lie close to the Areas of Outstanding Natural Beauty. Their protection and enhancement is therefore relevant to future minerals/waste development. • Minerals development and/or the development of waste facilities can be intrusive on the landscape and have the potential to cause damage to the designated and non-designated landscape areas. • The use of quarries as landfill (inert fill) sites lengthens the time for restoration and therefore increases landscape impacts. • The World Heritage Site was designated on the basis of its very high geological importance, which must be taken into consideration in planning for future minerals development/waste sites. • Cross boundary issues related to landscape may arise when potential minerals/waste developments are close to the boundaries of neighbouring authorities. This impact must be taken into consideration. The reverse is also true, requiring the establishment of a close working relationship between the neighbouring MPAs and Dorset MPA. • Increasingly, priority is placed on landscape protection and enhancement that is underpinned by analysis of local character and distinctiveness (physical, ecological, cultural and aesthetic). • There is increased recognition of the value of the wider countryside and coastal landscape, in addition to designated landscapes. • Landscape restoration and management opportunities should be maximised in relation to minerals/landfill operations and after-use. • Planning for good quality and inclusive site design and layout in new waste facilities and improvements to existing facilities. • There is the opportunity for mineral extraction/landfill sites to bring about landscape change in line with the opportunities identified in the National Character Area profiles and the emerging SE Dorset Green Infrastructure Strategy, and to create multi-functional landscapes • The interrelationship between landscape, biodiversity and cultural heritage needs to be recognised and taken into account • Development should be informed by the existing and ongoing assessment of Dorset's

Table 3: Key Sustainability Issues/Messages

	<p>landscape character.</p> <ul style="list-style-type: none"> • Historic mining activity can be an important part of landscape character and historic mining landscapes should be safeguarded. • Careful consideration of both the benefits and potential impacts of the development of waste facilities in a rural setting should be given, such as on farm anaerobic digestion. • Cumulative impacts on protected landscape where important mineral deposits occur, particularly in relation to ball clay and Purbeck Stone working. • Sites for new waste management facilities are difficult to find, particularly given the pressure from other developments. There may be limited options forcing the consideration of sites within the Green Belt
<p>Air Quality and Noise</p>	<ul style="list-style-type: none"> • The needs for waste management facilities, minerals operators and society's requirements for minerals to be reconciled with the need to protect human health, environmental quality and local amenity. • Contribute to meeting the requirements of the European Air Quality Framework Directive (96/62/EC) and its daughter directives, regarding specific atmospheric pollutants. Consider the interaction of air, water and land pollution when assessing waste and minerals operations. • Consider the impact of dust from minerals extraction, processing and waste sites and transportation as an air quality issue. • Consider noise as an issue in terms of health, environmental quality and local amenity. • Maintain and, where possible, improve air quality by limiting minerals and waste-related traffic growth and congestion, particularly road borne traffic and in AQMA's. The significance of minerals operations on air quality will depend on location. Transportation of minerals by road is increasingly likely to be an air quality issue due to congestion. • Air quality in Dorset is generally good, but specific areas face problems (principally traffic-related). • The distribution (number and location) of waste facilities throughout Dorset - significance of impacts can depend on location • Give consideration to decreasing the number and journey length of movements of waste and the use of sustainable transportation (rail, water etc) • Minerals development and waste sites should have regard to the contribution of tranquillity to local amenity and Dorset's distinctive environment. Waste and minerals planning should avoid eroding tranquillity in vulnerable or sensitive areas. • The impact of moving waste management up the waste hierarchy - diverting waste away from landfill
<p>Transport</p>	<ul style="list-style-type: none"> • Localised increases in HGV movements related to waste and mineral sites can create real and perceived safety issues that discourage the use of walking and cycling. • Waste and mineral sites located near to leisure trails can discourage their use due to air quality issues. • Localised congestion and delay can affect journey time reliability of bus services affecting patronage and thus financial viability. • Localised congestion and delay near to rail stations can affect people's decision to use this mode by increasing overall travel time. • Any increase in transportation movements related to waste using the Sandbanks Chain Ferry will exacerbate existing severe summertime delay.

Table 3: Key Sustainability Issues/Messages

	<ul style="list-style-type: none"> Minerals and waste development may lead to changes in local travel patterns that may intensify existing issues such as congestion or road safety. Changes to travel patterns must be estimated and potential impacts mitigated. Waste and minerals development may lead to increased congestion and delay on the identified Prime Transport Corridors making it more difficult to achieve the objectives of this key LTP policy. Waste and minerals developments are likely to increase HGV trips which can impact adversely on road safety, air quality and noise while increasing community severance – particularly in those towns and villages on the strategic road network. HGV movements on unsuitable rural roads can create severe road safety and delay issues whilst negatively impacting tranquillity through noise and air quality issues.
<p>Economic Development and Employment</p>	<ul style="list-style-type: none"> Sufficient provision of waste management facilities in the county will be required to support economic growth and the envisaged population expansion. A key economic issue relevant to waste planning is the legislative drive to divert waste from landfill, which is increasing the costs of disposing waste by landfill. The capacity of existing landfill sites is decreasing and other options need to be considered. The availability of alternative facilities for waste treatment in the county is key. If there are insufficient facilities within the county, there will be a cost implication for businesses and the public sector due to the need to transport waste to where facilities exist. Economic performance varies significantly within Dorset with a need for both rural and urban regeneration. The waste industry provides a limited, yet significant, contribution to the county's economic performance, particularly in rural areas. The provision of new facilities has the potential to generate skilled and highly skilled jobs linked to both the waste and renewable energy sectors, depending on the types of facilities and technologies promoted. The distribution of waste management facilities also impacts on accessibility to employment. There are opportunities for agricultural diversification through the provision of waste treatment facilities on farms. Anaerobic digestion is particularly suited to farm locations where a mix of crops and waste can be used as feedstock. Such technology provides the opportunity to generate renewable energy both for on-site use and for export. There are a small number of existing sites in Dorset which have taken up this opportunity. The creation of jobs by mineral companies is limited and may be temporary. An adequate supply of minerals will be required to support economic growth in key sectors and population expansion planned for. The need to support minerals operations in Dorset as an important component of a sustainable Dorset economy, particularly in rural areas. Minerals operations will need to be compatible with stated environmental objectives, recognising the contribution that the quality and distinctiveness of Dorset's environment can make as a long-term economic driver. The Mineral Sites Plan should seek to contribute to a more sustainable transport network in order to benefit the growth of the overall Dorset economy. Mineral working provides a limited, yet significant, contribution to the county's economic performance, particularly in specific rural areas where it is located.
<p>Soil and Land</p>	<ul style="list-style-type: none"> Soils can be damaged by the extraction of minerals and there may be cases where waste facilities are located in former quarries. Soil is a valuable raw material to be protected through careful storage during the life of any operations and then to be used during restoration of mineral extractions. However damage may be exacerbated by extending the life of storage if landfill follows mineral working. Protection is therefore a significant issue.

Table 3: Key Sustainability Issues/Messages

	<ul style="list-style-type: none"> • Soils can contain valuable seedbanks - these are particularly useful for the restoration of heathland. • Due regard should be given to the diverse role of soils as a resource and the interaction of land, water and air pollution from minerals operations, waste sites and transportation. • The highest quality agricultural land should be safeguarded where possible. • Loss of soil and high quality land • Mineral extraction should not cause irreversible loss of land quality and reclamation should be given a high priority with an emphasis on returning high quality land to agricultural use. • Regard should be given to land instability during mining operations and reclamation. • The production and use of products from waste treatment for use on land • Additional landfill increases the chance of conflict with land of high value and soils
<p>Population and Human Health</p>	<ul style="list-style-type: none"> • Population is projected to grow by 11.9% by 2035 with new development concentrated in urban areas such as Bournemouth, Poole and surrounding areas as well as the main towns of the respective local authority areas. This has an implication for waste arisings, which will need to be taken account of in ensuring sufficient waste management capacity is planned for. In addition, minerals will be needed to meet the need for new built development, or repair/refurbishment of existing infrastructure including buildings. • Provision of waste management facilities to move up the waste hierarchy would be in the public interest. • There is an ageing population and a large rural population in Dorset, which may have implications in relation to access to public facilities such as household recycling centres. • Potential impacts on health, well-being and quality of life should be taken into account in identifying suitable sites for waste management facilities and in considering the potential impact of noise, dust, blasting, vibration, lighting and water pollution generated by minerals operations. • The Waste and Mineral Sites Plans should take account of the need to conserve green areas for informal and formal recreation, and to site development away from communities, where possible, in order to minimise amenity impacts on local communities. • Safer roads and improved air quality should be promoted through sensitive planning for waste and minerals transportation, including where appropriate the provision of necessary infrastructure to support additional operations. • To move up the waste hierarchy in the context of planned growth and development, consideration should be given to ensuring that waste management is integral to the design of a new development; securing on-site management of construction and demolition wastes; provision of reduction and/or recycling infrastructure in housing or retail development; and accommodating space for recycling within housing design. • Identification of the necessary number of new minerals sites to meet the need for minerals, without causing unacceptable impacts on local communities. While minerals operations can provide valuable employment opportunities, adverse impacts of dust, noise and vibration on communities should be avoided.

5. Developing the SA Framework

- 5.1. SA is an objectives-based appraisal in which the impacts of a plan are assessed in relation to a series of aspirational objectives that promote sustainable development but which also reflect sustainability issues identified earlier in the assessment process in order to evaluate the extent to which policies will worsen or improve the current situation.
- 5.2. The final stage of Task A involves establishing a set of SA Objectives which reflect the key sustainability issues in order to assess the extent to which policies might worsen them or provide mechanisms for addressing them. The SA Objectives provide the framework for the subsequent assessment of initial policy alternatives, and for checking that any resulting refinements of the preferred policy positions are capable of delivering the most sustainable outcomes.
- 5.3. The Objectives must cover a wide range of issues and not be so numerous that the assessment becomes onerous so they are defined broadly by necessity. In order to provide an effective basis for assessment, a number of subsidiary criteria are defined for each Objective which provide a mechanism for judging whether a policy has a positive, negative or neutral impact.
- 5.4. Developing a SA framework provides a way in which sustainability effects can be described, analysed and compared and forms a central part of the SA process. A set of sustainability objectives and their indicators, which may be in the form of targets and are a way in which the achievement of the objectives can be measured, make up the SA framework. These objectives and indicators will also be used to monitor the implementation of the Local Plan, following adoption.

Scoping the Sustainability Issues

- 5.5. Sustainability appraisal begins with the scoping process, designed to identify the sustainability objectives which will comprise the SA Framework. The sustainability objectives are the basis for the assessment of the site nominations. The scoping process was originally carried out in June 2010. It was revised, updated and broadened to include waste issues, then re-published in March 2015 to ensure that the SA process covers the current sustainability issues relevant to minerals and waste planning in Bournemouth, Dorset and Poole. The full Scoping Report 2015 is available online⁵.
- 5.6. In accordance with the SEA Directive requirements, a review of relevant plans and programmes that may influence the Waste Plan and vice versa was undertaken. This detailed review is contained in the SA Scoping Report as a series of twelve separate topic papers, organised by topics identified in European Directive 2001/42/EC 'on the assessment of the effects of certain plans and programmes on the environment' (commonly referred to as the SEA Directive) plus social and economic topics to fulfil the requirements of Government guidance on sustainability appraisal and the Planning and Compulsory Purchase Act 2004.
- 5.7. Sustainability issues were then identified and their implications assessed for minerals planning and the baseline information to be collected. Objectives were developed to address these sustainability issues, as well as reflecting international, national, regional and local objectives. Indicators were then developed to measure how well the emerging policies and strategies would perform and help to achieve sustainability objectives. These objectives cover a full range of environmental issues, including those specified in the SEA Directive. The sustainability objectives also include a broad range of social and economic issues.
- 5.8. Each sustainability objective has associated indicators, specific questions which assist in determining how and to what extent the objective could potentially be affected by the development of the nominated sites. Tables 5, 6 and 7 set out the relationships between the SEA topics in the SEA Directive, sustainability objectives with relevant indicators and the site assessment criteria set out in the Minerals Strategy 2014.
- 5.9. For reference, the Environmental Assessment of Plans and Programmes Regulations 2004 require consideration of 'the likely significant effects on the environment, including short, medium and

⁵ See: <https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/dorset-county-council/sustainability-appraisal-minerals-and-waste.aspx>

long-term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects, on issues such as a) biodiversity; (b) population; (c) human health; (d) fauna; (e) flora; (f) soil; (g) water; (h) air; (i) climatic factors; (j) material assets; (k) cultural heritage, including architectural and archaeological heritage; (l) landscape; and (m) the inter-relationship between the issues referred to in sub-paragraphs (a) to (l)⁶.

Table 4 - SA Framework - Environmental Objectives/Indicators

Table 4 - SA Framework - Environmental Objectives/Indicators		
Sustainability Appraisal Objectives	Indicators <i>To what extent does the strategy or policy...</i>	Related SEA Directive Topics
1. To move waste management up the waste hierarchy and promote net self-sufficiency	<ul style="list-style-type: none"> • Assist in driving waste up the waste hierarchy? • Make provision for waste management facilities commensurate with the waste hierarchy? • Enable waste to be diverted from landfill? • Enable increased recycling or treatment of organic waste? • Enable waste to be managed locally, particularly within the local authority boundary 	Human health; Population; Social Considerations
2. To maintain, conserve and enhance biodiversity	<ul style="list-style-type: none"> • Conserve, enhance or create natural and semi-natural habitats of recognised ecological value and/or the green corridors that link them? • Directly or indirectly affect internationally or nationally designated or recognised sites or UK BAP habitats? • Conserve or enhance species diversity and avoid harm to internationally and nationally protected, scarce and rare species (including UK BAP species)? • Provide for positive management of existing habitats? • Assist species to adapt to the anticipated effects of climate change (i.e. through connecting habitats and/or providing greenspace)? • Reflect the South West Nature Map? • Expand the spatial extent of BAP priority habitat within Dorset? • Contribute to an adverse cumulative impact of development on biodiversity? 	Biodiversity; Fauna; Flora; Soil
3. To maintain, conserve and enhance	<ul style="list-style-type: none"> • Conserve or enhance the World Heritage Site and its setting? 	Material Assets;

⁶ 2004 No. 1633 Environmental Protection The Environmental Assessment of Plans and Programmes Regulations 2004

Table 4 - SA Framework - Environmental Objectives/Indicators

Sustainability Appraisal Objectives	Indicators <i>To what extent does the strategy or policy...</i>	Related SEA Directive Topics
geodiversity.	<ul style="list-style-type: none"> • Conserve or enhance geological SSSIs? • Create, extend or enhance Local Geological Sites? • Allow access to geodiversity resources for study? 	
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	<ul style="list-style-type: none"> • Protect or enhance the quantity and quality of ground, surface and sea waters? • Avoid adverse effects on existing patterns of groundwater flow and/or surface water flow? • Maintain water consumption within local carrying limits? 	Water; Human Health; Biodiversity; Climatic Factors
5. To reduce flood risk and improve flood management.	<ul style="list-style-type: none"> • Minimise the risks and impacts of flooding having taken into account climate change? • Minimise the numbers of people and property at risk from flooding? 	Water; Human Health; Climatic Factors;
6. To maintain, conserve and enhance the historic environment (including conservation areas, historic parks and gardens and other locally distinctive features and their settings).	<ul style="list-style-type: none"> • Cause a loss of, or harm to, the character and/or setting of historic assets? • Cause harm to the historic landscape? • Provide for the maintenance of the historic environment? • archaeological sites, historic buildings, • Provide new information on the historic environment, or improve education about and/or interpretation of the historic environment? 	Cultural Heritage (Architectural and Archaeological Heritage)
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	<ul style="list-style-type: none"> • Conserve and enhance landscape character, quality and distinctiveness, paying particular regard to AONB and other designated areas of high landscape and/or historic sensitivity or value? • Minimise the landscape and visual intrusion of waste facilities on sensitive and/or distinctive landscapes? • Contribute to an adverse cumulative impact of development on protected landscapes? 	Landscape;

Table 4 - SA Framework - Environmental Objectives/Indicators		
Sustainability Appraisal Objectives	Indicators <i>To what extent does the strategy or policy...</i>	Related SEA Directive Topics
	<ul style="list-style-type: none"> Encourage development of land which is not sympathetic to the identified landscape character of that location? Provide for the restoration of land to an appropriate after-use and landscape character through Landscape Restoration Strategies. Protect the open character of the South East Dorset Green Belt from inappropriate development 	
8. To protect and improve air quality and reduce the impacts of noise	<ul style="list-style-type: none"> Adversely affect air quality, including through transportation, particularly in Air Quality Management Areas? Increase the likelihood of higher levels of dust in the air? Increase the likelihood of higher levels of noise and vibration and impact on sensitive receptors? Increase the likelihood of higher levels of odour on sensitive receptors? 	Air; Human Health; Biodiversity; Flora; Fauna.
9. To maintain, conserve and enhance soil quality	<ul style="list-style-type: none"> Reduce the quantity or quality of the best and most versatile agricultural land? Encourage the de-contamination and/or re-use of soils? Conserve or enhance soil quality? Reduce the capacity of the soil to hold carbon? Increase land contamination? 	Soil; Flora; Fauna; Biodiversity;

Table 5 - SA Framework - Economic Objectives/Indicators

Table 5 - SA Framework - Economic Objectives/Indicators		
Sustainability Appraisal Objectives	Indicators <i>To what extent does the strategy or policy...</i>	Related SEA Directive Topics
10. To conserve and safeguard mineral resources.	<ul style="list-style-type: none"> Safeguard mineral resources from loss by permanent sterilisation? Encourage/promote the most efficient use of mineral resources? 	Material Assets;
11. To promote the use of	<ul style="list-style-type: none"> Encourage/promote the production and/or use of recycled or secondary aggregates? 	Material Assets;

Table 5 - SA Framework - Economic Objectives/Indicators		
Sustainability Appraisal Objectives	Indicators <i>To what extent does the strategy or policy...</i>	Related SEA Directive Topics
alternative materials.		
12. To provide an adequate supply of minerals to meet society's needs.	<ul style="list-style-type: none"> Contribute, in a sustainable way, to the supply of materials for new built development, or repair of existing built development, or to meet other needs for the mineral concerned? Contribute to the provision of a sustainable supply of minerals? 	Material Assets; Social Considerations; Human Health
13. To encourage sustainable economic growth.	<ul style="list-style-type: none"> Provide for waste management facilities in the county at an acceptable cost? Maintain or increase employment? Maintain and enhance skills levels, particularly through the provision of highly skilled jobs? Ensure that waste facilities and mineral sites, including the transportation of materials, do not prejudice the development of the local economy in Dorset? 	Social Considerations; Human Health;

Table 6 - SA Framework - Social Objectives and Indicators

Table 6 - SA Framework - Social Objectives and Indicators		
Sustainability Appraisal Objectives	Indicators <i>To what extent does the strategy or policy...</i>	Related SEA Directive Topics
14. To adapt to and mitigate the impacts of climate change.	<ul style="list-style-type: none"> Ensure new development minimises vulnerability and provides resilience to climate change? Minimise emissions of greenhouse gases from operations, ensuring the efficient use of energy, and maximising opportunities for the generation of renewable energy? 	Climatic Factors; Human Health; Social Considerations.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual	<ul style="list-style-type: none"> Reduce the negative impacts associated with minerals and waste transportation on the transport network as a whole? Reduce the impact of road traffic, in particular HGV trips, on local communities? Reduce the vehicle kilometres travelled for the transportation of minerals and waste? Support and encourage the use of sustainable modes of transport? 	Climatic Factors; Human Health; Social Considerations.

Table 6 - SA Framework - Social Objectives and Indicators		
Sustainability Appraisal Objectives	Indicators <i>To what extent does the strategy or policy...</i>	Related SEA Directive Topics
impacts.	<ul style="list-style-type: none"> • Support and encourage the use of low emission vehicles for the transportation of waste and minerals? • Support the carbon reduction targets set at the international, national and local level? • Support the road casualty reduction indicators set at the international, national and local level? 	
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	<ul style="list-style-type: none"> • Facilitate the use of rail or waterborne freight for the purpose of transporting waste and minerals? • Accommodate the efficient movement of people, goods and services thus supporting sustainable economic growth in the Bournemouth, Poole and Dorset area? 	Population; Material Assets; Human Health; Climatic Factors; Air
17. To sustain the health and quality of life of the population	<ul style="list-style-type: none"> • Contribute to quality of life through the provision of a network of accessible facilities to move waste up the hierarchy? • Ensure access for all to public facilities? • Impact on the quality of life of local communities (including through factors such as noise, artificial light, odour and vermin)? • Cause a cumulative impact on certain communities (i.e. through permitting further development in an area, or extending the life of an existing permission)? 	Human Health;
18. To enable safe access to countryside and open spaces.	<ul style="list-style-type: none"> • Promote linkages between open spaces, and enable/improve access to the countryside ? • Provide an opportunity for Suitable Alternative Natural Greenspace? • Reduce impacts on recreational and open spaces, Green Infrastructure and other land take issues including through the use of previously developed land? 	Human Health; Social Considerations

Sustainability Objectives and Site Assessment Criteria

5.10. Having identified the sustainability objectives, the sustainability appraisal would normally be carried out by assessing each site nomination against all the objectives. This includes taking into account

timescales, considering the short, medium and long term impacts or in mineral planning terms, possible impacts/benefits at the site preparation, working and restoration/aftercare stages.

- 5.11. In order to make the SA process more relevant to mineral site assessment and selection, the MPA has prepared a series of site selection criteria which are based on the sustainability objectives and can be applied to any nominated site.
- 5.12. The criteria, along with commentary on their use and application, are set out in Appendix 1 of the Bournemouth, Dorset and Poole Minerals Strategy 2014. The criteria relate directly to both the SEA Directive Issues and the sustainability objectives. They provide a standardised approach to assessing mineral site nominations and a clear audit trail to demonstrate how assessments have been undertaken.
- 5.13. They include both a subjective assessment of likely impacts and according to the level of impact, the assignment of a colour. The results of the criteria assessment provide a visual impression of the suitability of any site nomination. If there is a predominance of red/orange scores for any site assessment, this indicates that if the site is to progress it will likely need a higher level of mitigation than another site that records more greens.
- 5.14. All the sites have undergone this assessment. An earlier version of the Stage 1 Assessments can be seen here: <https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/dorset-county-council/minerals-planning-policy/mineral-sites-plan/site-appraisals-for-draft-mineral-sites-plan.aspx> along with a list of more detailed assessment of the proposed allocations.
- 5.15. Current site assessments are available in the examination library at: <https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/dorset-county-council/minerals-planning-policy/mineral-sites-plan/examination-library.aspx>

Table 7 - Site Selection Criteria and relationship to SEA Directive Issues

Table 7 - Site Selection Criteria and relationship to SEA Directive Issues	
Relevant SEA Directive Issues	Site Selection Criteria
<ul style="list-style-type: none"> • Biodiversity/Geodiversity • Fauna • Flora 	Site Selection Criterion C1: Does the proposal have any impact on international/European nature conservation designations?
	Site Selection Criterion C2: Does the proposal have an impact on areas used by Annex 1 Bird Species?
	Site Selection Criterion C3: Does the proposal have any impact on national designations for nature conservation?
	Site Selection Criterion C4: Does the proposal have any impact on protected species?
	Site Selection Criterion C5: Does the proposal have any impact on local recognitions/designations, including ancient woodland and veteran trees?

Table 7 - Site Selection Criteria and relationship to SEA Directive Issues

Relevant SEA Directive Issues	Site Selection Criteria
	Site Selection Criterion C6: Does the proposal have any impact on geodiversity?
<ul style="list-style-type: none"> • Landscape • Cultural heritage, including architectural and archaeological heritage 	Site Selection Criterion C7: Does the proposal have any impact on designated landscapes?
	Site Selection Criterion C8: What is the landscape capacity to accommodate the site?
	Site Selection Criterion C9: Does the proposal have any impact on historic landscapes?
<ul style="list-style-type: none"> • Cultural heritage, including architectural and archaeological heritage 	Site Selection Criterion C10: Does the proposal have any impact on historic buildings?
	Site Selection Criterion C11: Does the proposal have any impact on archaeology?
<ul style="list-style-type: none"> • Water • Human Health • Biodiversity, Fauna, Flora 	Site Selection Criterion C12: Does the proposal have any impact on hydrogeology or groundwater?
	Site Selection Criterion C13: Does the proposal have any impact on surface waters?
	Site Selection Criterion C14: Does the proposal have any impact on flooding or coastal stability?
<ul style="list-style-type: none"> • Air • Climatic Factors • Human Health 	Site Selection Criterion C16: Does the proposal have any impact on Air Quality Management Areas (AQMAs)?
<ul style="list-style-type: none"> • Material Assets 	Site Selection Criterion C17: What are the relevant economic considerations?
<ul style="list-style-type: none"> • Human Health • Population 	Site Selection Criterion C18: Does the proposal have any impact on Sensitive Human Receptors?
	Site Selection Criterion C19: Does the proposal have any impact on existing settlements?
	Site Selection Criterion C20:

Table 7 - Site Selection Criteria and relationship to SEA Directive Issues	
Relevant SEA Directive Issues	Site Selection Criteria
	Does the proposal have any impact on airport safety?
<ul style="list-style-type: none"> • <i>All</i> 	Site Selection Criterion C21: Does the proposal have any effect on cumulative impacts?
<ul style="list-style-type: none"> • Air • Climatic Factors • Human Health/Population • Biodiversity 	Site Selection Criterion C22: Does the proposal have any impact on carbon emissions?
<ul style="list-style-type: none"> • Human Health • Population • Biodiversity • Air/Climatic Factors 	Site Selection Criterion C23: Does the proposal have any impact on recreational land?
	Site Selection Criterion C24: Does the proposal have any impact on public rights of way?
	Site Selection Criterion C25: Are the access proposals acceptable?

5.16. Table 7 shows the relationship between SEA Directive Issues, the sustainability objectives and the site criteria, demonstrating the level of inter-relationship between them.

Table 8 - Relationship between SEA Directive Issues, Sustainability Appraisal Objectives and Site Selection Criteria

Table 8 - Relationship between SEA Directive Issues, Sustainability Appraisal Objectives and Site Selection Criteria			
SEA Directive Issues ⁷ →		→ Sustainability Appraisal Objectives ⁸ →	→ Site Assessment Criteria "Does the proposal have any impact on..."
ENVIRONMENTAL	Human Health; Population	SA1: To move waste management up the waste hierarchy and promote net self-sufficiency	SA1: N/A to minerals
		SA17: To sustain the health and quality of life of the population	SA17: C18 - Sensitive Human Receptors C19 - Existing Settlements C20 - Airport Safety C21 - Cumulative Impacts C22 - Carbon Emissions C23 - Recreational Land C24 - Public Rights of Way C25 - 'Are access proposals acceptable?'

⁷ From SI 2004 No. 1633 The Environmental Assessment of Plans and Programmes Regulations 2004

⁸ See 'Minerals and Waste Sustainability Appraisal Scoping Report 2015': <https://www.dorsetforyou.gov.uk/354652>

Table 8 - Relationship between SEA Directive Issues, Sustainability Appraisal Objectives and Site Selection Criteria

SEA Directive Issues ⁷ →	→ Sustainability Appraisal Objectives ⁸ →	Site Assessment Criteria → "Does the proposal have any impact on..."
Biodiversity; Flora; Fauna	SA2: To maintain, conserve and enhance biodiversity.	C1 - International/European nature conservation designations C2 - Areas used by Annex 1 Bird Species C3 - National designations for nature conservation C4 - Protected Species C5 - Local Recognitions/Designations, including Ancient Woodland and Veteran trees C12 - Hydrogeology or Groundwater C13 - Surface Waters C21 - Cumulative Impacts
Material Assets	SA3: To maintain, conserve and enhance geodiversity.	C6 – Geodiversity
Landscape	SA7: To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	C7 - Designated Landscapes C8 - Landscape Capacity to accommodate the site C9 - Historic Landscapes C21 Cumulative impacts

Table 8 - Relationship between SEA Directive Issues, Sustainability Appraisal Objectives and Site Selection Criteria

SEA Directive Issues ⁷ →	→ Sustainability Appraisal Objectives ⁸ →	→ Site Assessment Criteria “Does the proposal have any impact on...”
Cultural Heritage (Architectural and Archaeological Heritage)	SA6: To maintain, conserve and enhance the historic environment (including conservation areas, historic parks and gardens and other locally distinctive features and their settings).	C9 - Historic Landscapes C10 - Historic Buildings C11 - Archaeology C21 Cumulative impacts
Water	SA4: To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	C12 - Hydrogeology or Groundwater C21 - Cumulative Impacts
	SA5: To reduce flood risk and improve flood management.	C13 - Surface Waters C14 - Flooding or Coastal Stability C21 - Cumulative Impacts
Soil.	SA9: To maintain, conserve and enhance soil quality	C15 - Existing Soils or Land Type C21 - Cumulative Impacts
Air.	SA8: To protect and improve air quality and reduce the impacts of noise	C16 - Air Quality Management Areas (AQMAS) C21 - Cumulative Impacts

Table 8 - Relationship between SEA Directive Issues, Sustainability Appraisal Objectives and Site Selection Criteria

SEA Directive Issues ⁷ →		→ Sustainability Appraisal Objectives ⁸ →	→ Site Assessment Criteria "Does the proposal have any impact on..."
ECONOMIC	Material Assets	SA3: To maintain, conserve and enhance geodiversity.	C6 - Geodiversity C17 - Economic Development
		SA10: To conserve and safeguard mineral resources.	
	SA11: To promote the use of alternative materials.	C17 - Economic Development	
SA12: To provide an adequate supply of minerals to meet society's needs.			
		SA13: To encourage sustainable economic growth.	C17 - Economic Development
		SA14: To adapt to and mitigate the impacts of climate change	C16 - Air Quality Management Areas (AQMAs) C21 - Cumulative Impacts C22 - Carbon Emissions
SOCIAL	Social Considerations.	SA15: To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	C25 - 'Are access proposals acceptable?'
		SA16: To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	

Table 8 - Relationship between SEA Directive Issues, Sustainability Appraisal Objectives and Site Selection Criteria

SEA Directive Issues ⁷ →	→ Sustainability Appraisal Objectives ⁸ →	→ Site Assessment Criteria "Does the proposal have any impact on..."
		SA17: To sustain the health and quality of life of the population
		SA18: To enable safe access to countryside and open spaces
		C18 - Sensitive Human Receptors C19 - Existing Settlements C20 - Airport Safety C21 - Cumulative Impacts C23 - Recreational Land C24 - Public Rights of Way

6. Developing and Refining Options and Assessing Effects

Introduction

- 6.1. Stage B of the Sustainability Appraisal is the development and refinement of options and policies and an assessment of their effects. Assessment of alternatives, and their effects, is central to the SA/SEA process and is a particularly important element of policy development. This chapter summarises how it applies to assessing sites and areas, including consideration of any mitigation measures and ways to maximise beneficial effects along the way.
- 6.2. The effects of the various options, including site options, have been tested against the SA objectives that were set out in the Scoping Report. The aim of the appraisal is to identify any significant conflicts or combined effects between the options and the SA objectives.

Relationship between Minerals Strategy and Mineral Sites Plan

- 6.3. As noted earlier, the Minerals Local Plan for Bournemouth, Dorset and Poole will consist of the Minerals Strategy (including development management policies - adopted 2014) and the Mineral Sites Plan, identifying the spatial locations required to deliver the Minerals Strategy. Collectively these documents will:
 - Establish the strategy for mineral provision in Bournemouth, Dorset and Poole, including the development management policies that will be used to determine applications for mineral development
 - Identify specific locations where minerals could be worked in Bournemouth, Dorset and Poole in order to meet society's needs, and
 - Show how this can be achieved without compromising the unique environment of Bournemouth, Dorset and Poole.
- 6.4. The Minerals Strategy was adopted in 2014. As part of its preparation a SA/SEA was prepared. This assessed the proposed mineral strategies and the effects of the development management policies. It formed part of the Examination into the Minerals Strategy, and can be seen at: <https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/dorset-county-council/minerals-planning-policy/mineral-strategy/minerals-strategy.aspx>
- 6.5. **The Sustainability Appraisal of the Mineral Sites Plan does not re-appraise the overall strategic approaches of the Minerals Strategy.** The Mineral Sites Plan (MSP) identifies and designates the specific sites and areas required to deliver the component mineral strategies of the Minerals Strategy. It also includes additional policies to facilitate the supply of minerals and restoration of sites, including an aggregates Area of Search, a Puddletown Road site management and restoration policy and safeguarding of mineral sites and infrastructure.

Options Appraised in the Mineral Sites Plan Sustainability Appraisal

- 6.6. The Mineral Sites Plan sustainability appraisal has considered and appraised:
 - Options for **numbers of site allocations** to include in the Plan, and;
 - Options for **site allocations** to be included, and;
 - **Policies** included in the Mineral Sites Plan.
- 6.7. In terms of location, options for the location of mineral sites are restricted since minerals can only be worked where they are found. In addition, the site selection process is based on the approach that sites are favoured if they have a willing promoter/backer. Although this identifies sites that are more like to be deliverable, it also has the effect of further restricting site location options.
- 6.8. Appraisal of spatial location has taken place through the separate assessment of each site nomination that has been carried out and the results of these assessments are presented in Appendices A to C. Assessments of current, proposed allocations are in Appendix A; assessment of sites not included in the Draft Mineral Sites Plan, but not actually withdrawn, are in Appendix B. Assessments of withdrawn/permitted and/or unacceptable sites are in Appendix C.

- 6.9. In terms of options, the numbers of sites to be identified in the Plan is related to the level of provision of various minerals to be identified through the Plan.
- 6.10. The Mineral Sites Plan covers a range of minerals - aggregates (both sand and gravel and crushed rock), ball clay, Purbeck Stone, and other building stone (not Purbeck Stone or Portland Stone). Of these, sand and gravel and Purbeck Stone have had the greatest number of site nominations. The other mineral types have had far fewer. Only one site allocation was progressed for the extraction of ball clay at Trigon. Planning permission was granted for this site in 2018. As a result, this site allocation was removed from the MSP. There are no other ball clay allocations.
- 6.11. In the interest of ensuring adequate provision of minerals, options for the numbers of site nominations for ball clay, crushed rock and other building stone to be included have not been separately assessed.
- 6.12. Three other building stone allocations are proposed. All are small sites, producing low levels of stone and generally for a quite local market. It is considered appropriate to include all three nominated sites, without specific justification for the number selected.
- 6.13. Sand and gravel and Purbeck Stone were different, given the number of site nominations received for these minerals. Sand and gravel, of the minerals produced in Dorset, generally require the largest sites and as such are likely to generally have greater impacts. Sand and gravel and Purbeck Stone are the only minerals where there is an annual production figure, even if only (for Purbeck Stone) a guideline figure.

Crushed rock

- 6.14. The Bournemouth, Dorset and Poole Minerals Strategy notes (paragraph 7.61) that it is expected that existing crushed rock reserves, primarily on Portland, will be adequate to maintain supply during the Plan period. Paragraph 7.62 goes on to note that there may be exceptional circumstances where it may be appropriate to grant permission for a new crushed rock quarry. Policy AS3 establishes this approach.
- 6.15. One site allocation - Swanworth Quarry Extension PK16 - has been put forward for future provision of crushed rock (see Appendix A). Given its location in an Area of Outstanding Natural Beauty, its inclusion in the Plan has required detailed justification to demonstrate that in this case exceptional circumstances apply.
- 6.16. The main markets for aggregate, including crushed rock, in Bournemouth, Dorset and Poole can be taken to be Weymouth/Dorset and surrounding villages in the west; and the eastern Dorset/Bournemouth and Poole/Christchurch conurbation in the east. The former is already supplied by the Portland quarries and the latter by the existing Swanworth Quarry.
- 6.17. The type of rock - Portland limestone - produced in the two locations is the same, and it is put to similar uses. There is therefore no inherent difference in rock produced, or in the qualities/uses of the output of each area. Further information about the uses of the rock and the potential for substituting other types of aggregate are set out in **Appendix E** of this document.
- 6.18. **Table 9** below compares the location of the proposed Swanworth Quarry allocation, within Purbeck, against the alternative locational options. One of the options is sourcing crushed rock from the Mendips/Somerset, imported by road and rail. The other option is sourcing local land-won crushed rock entirely from Portland, distributed by road. Primarily on transport sustainability grounds, the preferred option is to maintain a source of crushed rock within Purbeck - although it is recognised that this has landscape and other implications.
- 6.19. On the assessment of locations, as may be expected the Purbeck location performs well on transport sustainability grounds for supply to the east Dorset/Bournemouth/Poole markets. However, the location in Purbeck does have landscape impacts which must be addressed. The Mineral Planning Authority took the position that the transport/sustainability benefits associated with a location in Purbeck justify the consideration of the Swanworth Extension through the plan allocation process of the Draft Mineral Sites Plan. A series of modifications were proposed through the examination process. These have been assessed in this document and should assist in reducing the impacts of

quarrying the extension area to acceptable levels.

- 6.20. The fact that the current Swanworth Quarry maintains an output approximately equal to the output from Portland quarries indicates the viability of the current Swanworth quarry, and the need for a source of crushed rock in this area. It is expected that the proposed extension would maintain this viability, subject to other factors such as the need for and merits of maintaining an additional source of crushed rock outside Portland; where the likely market is going to be; the uses of the crushed rock; and whether alternative sources of aggregate could be substituted.
- 6.21. There are benefits in maintaining an alternative source of crushed rock outside of Portland, particularly one which supplies the Bournemouth/Poole/eastern Dorset market. The geology of the county would require that such a quarry be located in Purbeck. The fact there is already a quarry in this area supplying crushed rock and wishing to extend is also beneficial, providing the landscape impacts that would result can be satisfactorily addressed.

Table 9 - Sustainability appraisal of options for a supply of crushed rock - outside of Portland

Table 9 - Sustainability appraisal of options for a supply of crushed rock - outside of Portland						
Sustainability Objectives	Isle of Portland		Mendips/Somerset		PK16 Swanworth Quarry Extension	
1. To move waste management up the waste hierarchy and promote net self sufficiency	Not relevant to this policy.		Not relevant to this policy.		Not relevant to this policy.	
2. To maintain, conserve and enhance biodiversity	Possible impacts on biodiversity during working		Possible impacts on biodiversity during working		Possible impacts on biodiversity during working	
	Impacts due to transport of crushed rock - for serving Bournemouth and Poole market, Portland has greater impacts than Swanworth Extension	--	Impacts due to transport of crushed rock - for serving Bournemouth and Poole market, Somerset has greater impacts than Swanworth Extension or increased Portland output	--	Impacts due to transport of crushed rock - best option for serving Bournemouth and Poole market.	-
	Possible benefits to biodiversity as part of restoration and after-use	+	Possible benefits to biodiversity as part of restoration and after-use	+	Possible benefits to biodiversity as part of restoration and after-use	+
3. To maintain, conserve and enhance geodiversity.	Impacts on geodiversity due to quarrying	-	Impacts on geodiversity due to quarrying	-	Impacts on geodiversity due to quarrying	-
	Restoration can leave exposed faces for future use/study	+	Restoration can leave exposed faces for future use/study	+	Restoration can leave exposed faces for future use/study	+

Table 9 - Sustainability appraisal of options for a supply of crushed rock - outside of Portland

Sustainability Objectives	Isle of Portland		Mendips/Somerset		PK16 Swanworth Quarry Extension	
<p>4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.</p>	<p>Potential impacts on surface/groundwater during working. These will be managed through planning and other controls.</p> <p>Levels of water consumption also controlled through planning/other controls.</p>	<p>- ?</p>	<p>Potential impacts on surface/groundwater during working. These will be managed through planning and other controls.</p> <p>Levels of water consumption also controlled through planning/other controls.</p>	<p>- ?</p>	<p>Potential impacts on surface/groundwater during working. These will be managed through planning and other controls.</p> <p>Levels of water consumption also controlled through planning/other controls.</p>	<p>- ?</p>
<p>5. To reduce flood risk and improve flood management.</p>	<p>Any risk of flooding, together with required improvements to flood management, to be managed through planning controls.</p> <p>If risks are unacceptable site will not be developed.</p>	<p>- ?</p>	<p>Any risk of flooding, together with required improvements to flood management, to be managed through planning controls.</p> <p>If risks are unacceptable site will not be developed.</p>	<p>- ?</p>	<p>Any risk of flooding, together with required improvements to flood management, to be managed through planning controls.</p> <p>If risks are unacceptable site will not be developed.</p>	<p>- ?</p>
<p>6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).</p>	<p>Any potential risks of impacts to the historic environment will be managed through planning controls, or the site cannot be developed.</p> <p>Possible restoration benefits?</p>	<p>- ? + ?</p>	<p>Any potential risks of impacts to the historic environment will be managed through planning controls, or the site cannot be developed.</p> <p>Possible restoration benefits?</p>	<p>- ? + ?</p>	<p>Any potential risks of impacts to the historic environment will be managed through planning controls, or the site cannot be developed.</p> <p>A modification is proposed to strengthen the protection of the historic environment through the addition of an additional Development Guideline.</p> <p>Possible restoration benefits?</p>	<p>- ? + ?</p>

Table 9 - Sustainability appraisal of options for a supply of crushed rock - outside of Portland

Sustainability Objectives	Isle of Portland		Mendips/Somerset		PK16 Swanworth Quarry Extension	
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	Any potential risks of impacts to landscape will be managed through planning controls, or the site cannot be developed. Possible benefits in restoration...	- ? + ?	Any potential risks of impacts to landscape will be managed through planning controls, or the site cannot be developed. Possible benefits in restoration...	- ? + ?	Potential for impacts during working, including impacts on national landscape designations (Area of Outstanding Natural Beauty and Heritage Coast) - impacts can be reduced through planning controls Possible benefits in restoration.	- - + ?
8. To protect and improve air quality and reduce the impacts of noise.	Any potential risks of loss of air quality or noise impacts will be managed through planning controls, or the site cannot be developed.	- ?	Any potential risks of loss of air quality or noise impacts will be managed through planning controls, or the site cannot be developed.	- ?	Any potential risks of loss of air quality or noise impacts will be managed through planning controls, or the site cannot be developed.	- ?
9. To maintain, conserve and enhance soil quality.	Any potential risks of long-term impacts/damage to soil quality to be managed through planning controls.	- ?	Any potential risks of long-term impacts/damage to soil quality to be managed through planning controls.	- ?	Any potential risks of long-term impacts/damage to soil quality to be managed through planning controls.	- ?
10. To conserve and safeguard mineral resources.	It is expected that development of any site will contribute to achieving the best and most efficient use of mineral resources. Planning controls will be used where appropriate to contribute to this.	+	It is expected that development of any site will contribute to achieving the best and most efficient use of mineral resources. Planning controls will be used where appropriate to contribute to this.	+	It is expected that development of any site will contribute to achieving the best and most efficient use of mineral resources. Planning controls will be used where appropriate to contribute to this.	+

Table 9 - Sustainability appraisal of options for a supply of crushed rock - outside of Portland

Sustainability Objectives	Isle of Portland		Mendips/Somerset		PK16 Swanworth Quarry Extension	
11. To promote the use of alternative materials.	All locations have the potential to incorporate recycling facilities, and promote supply of recycled aggregate. Planning controls will be used where appropriate to contribute to this.	+ ?	All locations have the potential to incorporate recycling facilities, and promote supply of recycled aggregate. Planning controls will be used where appropriate to contribute to this.	+ ?	All locations have the potential to incorporate recycling facilities, and promote supply of recycled aggregate. Planning controls will be used where appropriate to contribute to this.	+ ?
12. To provide an adequate supply of minerals to meet society's needs.	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.	+	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.	+	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.	+
13. To encourage sustainable economic growth	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.	+	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.	+	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.	+
14. To adapt to and mitigate the impacts of climate change.	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.	+	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.	+	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.	+
15. To minimise the negative impacts of waste and minerals development on the	All locations will have impacts. The closer the site/location to the market, the less the transport-related impacts.	--	All locations will have impacts. The closer the site/location to the market, the less the transport-related impacts.	--	All locations will have impacts. The closer the site/location to the market, the less the transport-related impacts.	-

Table 9 - Sustainability appraisal of options for a supply of crushed rock - outside of Portland

Sustainability Objectives	Isle of Portland	Mendips/Somerset	PK16 Swanworth Quarry Extension
<p>transport network, mitigating any residual impacts.</p>	<p>In all cases planning controls can assist in minimising impacts.</p> <p>To provide a crushed rock supply to the eastern Dorset/Bournemouth and Poole market, impacts from Portland will be higher than Swanworth but not as high as supply from Somerset.</p>	<p>In all cases planning controls can assist in minimising impacts.</p> <p>To provide a crushed rock supply to the eastern Dorset/Bournemouth and Poole market, impacts from Somerset will be higher than Portland and even higher than supply from Swanworth.</p>	<p>In all cases planning controls can assist in minimising impacts.</p> <p>To provide a crushed rock supply to the eastern Dorset/Bournemouth and Poole market, impacts from Swanworth will be the lowest of the three options.</p> <p>A modification is proposed to strengthen the protection through the addition of an additional Development Guideline. This will ensure a new access is constructed to the extension area and ensure no access from the north.</p>
<p>16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.</p>	<p>Road transport is used to take the crushed rock off Portland</p>	<p>-</p> <p>Road transport is used to bring crushed rock into Dorset from Somerset - such a long route would lead to impacts.</p> <p>There is the opportunity to use lorries that have taken sand to Somerset, to bring crushed rock back to Dorset - and vice versa.</p>	<p>Road transport is used to take the crushed rock out of Purbeck - but the quarry is well placed to serve eastern Dorset and Bournemouth and Poole.</p> <p>-/+</p>

Table 9 - Sustainability appraisal of options for a supply of crushed rock - outside of Portland

Sustainability Objectives	Isle of Portland		Mendips/Somerset		PK16 Swanworth Quarry Extension			
		Crushed rock is also imported into Poole by rail - a more sustainable option.		17. To sustain the health and quality of life of the population.	All locations/sites have the potential to affect health/quality of life of local residents. Planning controls will be used where appropriate to mitigate impacts to an acceptable level and protect residents.	- ?	All locations/sites have the potential to affect health/quality of life of local residents. Planning controls are used to mitigate impacts to an acceptable level and protect residents.	- ?
18. To enable safe access to countryside and open spaces.	All locations have the potential to affect access to the countryside, either positively or negatively. Where appropriate planning controls will be used to either improve it or mitigate impacts.	- /+	All locations have the potential to affect access to the countryside, either positively or negatively. Where appropriate planning controls will be used to either improve it or mitigate impacts.	-/+	All locations have the potential to affect access to the countryside, either positively or negatively. Where appropriate planning controls will be used to either improve it or mitigate impacts.	-/+		

Conclusions

This assessment is of potential locations for crushed rock supply, as opposed to specific sites.

All three locations perform similarly over most of the Sustainability Objectives - the real difference is on transport, or on transport related impacts. Swanworth Quarry also shows significant impacts on landscape and visual impacts.

If it is considered beneficial to have an alternative source of supply of crushed rock apart from Portland, and if it is considered that Portland can reasonably serve the Weymouth/Dorchester market and if the remaining significant market is considered to be eastern Dorset/Bournemouth and Poole - then the closer the location to this market the better.

Swanworth is best located to serve the eastern Dorset market, whereas Portland is not as well located for this.

Quarries in the Mendips lead to transport impacts if they use road transport to supply crushed rock - although there is potential to use back-haulage i.e. transport loads each way. There is also the option to use rail, importing crushed rock into Poole. However, it appears that significant quantities are being imported, likely more than can be imported by rail only.

Table 9 - Sustainability appraisal of options for a supply of crushed rock - outside of Portland

Sustainability Objectives	Isle of Portland	Mendips/Somerset	PK16 Swanworth Quarry Extension
	<p>This indicates there is a sustainability benefit in maintaining a source of crushed rock to serve eastern Dorset/Bournemouth and Poole apart from Portland. This could be Swanworth or the Mendips - and although there are more sustainable options for bringing the crushed rock from Somerset, where road transport is used the impacts are higher than for a local source.</p> <p>Other issues to take into consideration are the uses of the crushed rock, and the potential to substitute other types of aggregate (i.e. sand and gravel) for the Swanworth crushed rock.</p> <p>Further information is provided in Appendix E of this document.</p>		

Purbeck Stone

- 6.22. The Minerals Strategy, through Policy PK1, commits to providing for the production of some 20,000 tonnes per annum (tpa) of saleable stone. A number of Purbeck Stone sites have been nominated and the Mineral Planning Authority had to decide how many of these should be included in the Plan.
- 6.23. Unlike sand and gravel, it is more difficult to assess with any certainty the amount of saleable Purbeck Stone contained within a site nomination. Furthermore, there is a wide range of types (beds) of Purbeck Stone demanded by the market, and not every site will necessarily have a full range of beds/types. However, since the market demands a full range of Purbeck Stone types, operators/site nominees will ideally want access to a range of sites to provide a range of stone types. In addition, Purbeck Stone quarries are generally quite small with lower impacts.
- 6.24. For these reasons, it was considered appropriate to include all site nominations provided the individual site assessment of each site has not identified any impacts not capable of mitigation.

Sand and gravel

- 6.25. For sand and gravel, the current planned provision varies annually, but to date the figure of the average of the past ten years of sales has been used to determine the current landbank.
- 6.26. If all the sand and gravel site nominations were included in the DMSP, this would be an over-provision in relation to predicted demand. The Mineral Planning Authority has options – to over-provide at the plan allocation stage, or to provide an amount that is relatively close to the predicted requirement over the Plan period. Both options have been tested **in Table 9A** below:
- **Option 1:** publish the DMSP with just enough sites to meet expected demand, assuming that all sites will be found acceptable following Examination – this reduces the risk of environmental impacts but increases the risk of the Plan being found unsound on grounds of insufficient provision.
 - **Option 2:** publish the DMSP with an over-provision of supply (i.e. more sites than needed to just meet demand), with the expectation that some sites will be rejected following the Examination – this reduces the risk that the Plan could be found unsound for inadequate provision of aggregate, but potentially increasing impacts on amenity and the environment.
- 6.27. Both of these options assumed that an Aggregates Area of Search would be included, providing additional flexibility should any of the allocated sites in the adopted MSP be found unacceptable at planning application stage, or should there be an increase in demand that cannot be met in the short term by the allocated sites. It should be noted that one of the proposed modifications sees the loss of the Aggregates Area of search (Policy MS2). The Area of Search is replaced by reliance on the resource blocks. See Chapter 7 for the full appraisal of the modified Policy MS2.
- 6.28. Following the appraisal of these options, it was determined that including more rather than less sand and gravel sites in the Draft Mineral Sites Plan prior to Examination was preferable, on the basis that this provides more flexibility and greater certainty that, should some of the sites be rejected at Examination or not come forward during the Plan period, the Plan would still be able to meet sand and gravel demand. The assessment of these options has been re-assessed to consider the impact of the modified MS2.

Table 9a - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate

Table 9a - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate⁹				
Sustainability Objectives	Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan	Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan		
1. To move waste management up the waste hierarchy and promote net self sufficiency	Not relevant			
2. To maintain, conserve and enhance biodiversity	<ul style="list-style-type: none"> All site options can be expected to have some level of impact, and the greater the number of sites identified, the greater the level of impact that can be expected across the Plan area. 	-	<ul style="list-style-type: none"> All options can be expected to have some level of impact, and the less the number of sites identified, the less the level of impact that can be expected across the Plan area. 	+
	<ul style="list-style-type: none"> Identifying more sites will reduce the risk that the Plan will be found unsound for inadequate provision for aggregates. 	+	<ul style="list-style-type: none"> Identifying less sites will increase the risk that the Plan will be found unsound for inadequate provision for aggregates. 	-
3. To maintain, conserve and enhance geodiversity.	<ul style="list-style-type: none"> Sand and gravel sites are not expected to have any particular impacts, either positive or negative, on geodiversity. 			

⁹ **The original assessment assumed that MS2 allocated an Area of Search for Sand and Gravel. A modification is proposed to remove reference to an Area of Search but to rely on the resource blocks within a policy to deal with unallocated sites. As appropriate the assessment below has been updated to reflect this modification.**

Table 9a - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate⁹

Sustainability Objectives	Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan	Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	<ul style="list-style-type: none"> All options can be expected to have some level of impact, and the greater the number of sites identified, the greater the level of impact that can be expected across the Plan area. 	<p style="text-align: center;">-</p> <ul style="list-style-type: none"> All options can be expected to have some level of impact, and the less the number of sites identified, the less the level of impact that can be expected across the Plan area. <p style="text-align: right;">+</p>
	<ul style="list-style-type: none"> Identifying more sites will reduce the risk that the Plan will be found unsound for inadequate provision for aggregates. 	<p style="text-align: center;">+</p> <ul style="list-style-type: none"> Identifying less sites will increase the risk that the Plan will be found unsound for inadequate provision for aggregates. <p style="text-align: right;">-</p>
5. To reduce flood risk and improve flood management.	<ul style="list-style-type: none"> More sites can provide greater benefits of flood water storage and will also reduce the risk that the Plan will be found unsound for inadequate provision for aggregates. 	<p style="text-align: center;">+</p> <ul style="list-style-type: none"> Identifying less sites will increase the risk that the Plan will be found unsound for inadequate provision for aggregates. <p style="text-align: right;">-</p>
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic	<ul style="list-style-type: none"> The greater the number of sites identified, the greater the likelihood that there will be some impacts across the Plan area. 	<p style="text-align: center;">-</p> <ul style="list-style-type: none"> The less the number of sites identified, the less the likelihood that there will be some impacts across the Plan area. <p style="text-align: right;">+</p>

Table 9a - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate⁹

Sustainability Objectives	Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan	Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan
parks and gardens and other locally distinctive features and their settings).	<ul style="list-style-type: none"> The greater the number of sites identified, the less the risk that the Plan will be found unsound for inadequate provision for aggregates. 	<p style="text-align: center;">+</p> <ul style="list-style-type: none"> The lower the number of sites identified, the greater the risk that the Plan will be found unsound for inadequate provision for aggregates. <p style="text-align: center;">-</p>
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	<ul style="list-style-type: none"> All site proposals are likely to have some landscape/visual impacts, and the greater the number of sites identified, the greater the level of expected impact across the Plan area. 	<p style="text-align: center;">-</p> <ul style="list-style-type: none"> All site proposals are likely to have some landscape/visual impacts. If fewer sites are identified, this could be expected to lead to a reduced impact across the Plan area. <p style="text-align: center;">+</p>
	<ul style="list-style-type: none"> Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. 	<p style="text-align: center;">+</p> <ul style="list-style-type: none"> Identifying less sites than might actually be needed could increase the risk that the Plan will be found unsound in not providing for adequate aggregates provision. <p style="text-align: center;">-</p>
8. To protect and improve air quality and reduce the impacts of noise.	<ul style="list-style-type: none"> Quarrying aggregates is likely to have some impacts on air quality, and will result in some noise. The greater the number of sites identified, the greater the level of expected impact across the Plan area. 	<p style="text-align: center;">-</p> <ul style="list-style-type: none"> Quarrying aggregates is likely to have some impacts on air quality, and will result in some noise. The less the number of sites identified, the less the level of expected impact across the Plan area. <p style="text-align: center;">+</p>

Table 9a - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate⁹

Sustainability Objectives	Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan	Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan
	<ul style="list-style-type: none"> Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. 	<p style="text-align: center;">+</p> <ul style="list-style-type: none"> Identifying potentially fewer sites that might actually be needed is expected to increase the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. <p style="text-align: center;">-</p>
<p>9. To maintain, conserve and enhance soil quality.</p>	<ul style="list-style-type: none"> Although soils can be removed prior to quarrying and re-spread later, it is expected that there will be some impacts, even if only temporary. The greater the number of quarries identified and developed, the greater the impacts on soils/soil quality. 	<p style="text-align: center;">-</p> <ul style="list-style-type: none"> The less the number of quarries identified and developed, the less the likely impacts on soils/soil quality across the Plan area. <p style="text-align: center;">+</p>
	<ul style="list-style-type: none"> Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. 	<p style="text-align: center;">+</p> <ul style="list-style-type: none"> Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. <p style="text-align: center;">-</p>
<p>10. To conserve and safeguard mineral resources.</p>	<ul style="list-style-type: none"> Identifying and allocating more sites will ensure the protection and safeguarding of more mineral. It will give greater certainty and security of supply, should one or more of the proposed sites be found unsuitable, either at the allocation stage or at the planning application stage. Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan 	<p style="text-align: center;">+</p> <ul style="list-style-type: none"> Identifying less sites will secure/protect less mineral. Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. <p><u>Updated Assessment</u></p> <ul style="list-style-type: none"> The modifications proposed to MS2 should increase the Plans flexibility. Increasing the <p style="text-align: center;">-</p>

Table 9a - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate⁹

Sustainability Objectives	Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan	Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan
	<p>will be found unsound on grounds of inadequate provision for aggregates supply.</p> <ul style="list-style-type: none"> • However the more sites that are developed, the greater the level of impacts which could be experienced across the Plan area. 	<p>likelihood of unallocated sites coming forward. This provides a level of certainty that might reduce the risk of the Plan being found unsound on grounds of inadequate provision for aggregates supply.</p> <ul style="list-style-type: none"> • The fewer the number of sites identified, the less the level of impacts that could be experienced across the Plan area. <p style="text-align: center;">-</p> <p style="text-align: right;">+</p>
<p>11. To promote the use of alternative materials.</p>	<ul style="list-style-type: none"> • Greater numbers of sand and gravel sites could have a negative impact on production of alternatives to land-won sand and gravel. <p style="text-align: right;">-</p>	
<p>12. To provide an adequate supply of minerals to meet society's needs.</p>	<ul style="list-style-type: none"> • Identifying a higher number of sites will contribute to ensuring an adequate supply of minerals. • It will also reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. 	<ul style="list-style-type: none"> • Identifying a fewer number of sites could make the adequate supply of minerals less certain. • It would also increase the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. <p style="text-align: center;">+</p> <p><u>Updated Assessment</u></p> <ul style="list-style-type: none"> • The modifications proposed to MS2 should increase the Plans flexibility. Increasing the likelihood of unallocated sites coming forward. This provides a level of certainty that might reduce the risk of the Plan being found unsound <p style="text-align: right;">-</p>

Table 9a - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate⁹

Sustainability Objectives	Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan	Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan
		<p>on grounds of inadequate provision for aggregates supply.</p>
	<ul style="list-style-type: none"> • However the more sites that are developed, the greater the level of impacts which could be experienced across the Plan area. 	<p>–</p> <ul style="list-style-type: none"> • The fewer the number of sites identified, the less the level of impacts that could be experienced across the Plan area. <p>+</p>
<p>13. To encourage sustainable economic growth</p>	<ul style="list-style-type: none"> • It is expected that identifying more aggregates sites will benefit the economy, encouraging sustainable economic growth. • Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. 	<ul style="list-style-type: none"> • A lower supply of aggregate could have a constraining effect on economic growth, but it is unlikely that production would be so low as to significantly limit the economy – this would trigger a review of the Minerals Strategy. • The less the number of sites identified, the less the level of expected impact across the Plan area. <p><u>Updated Assessment</u></p> <ul style="list-style-type: none"> • The modifications proposed to MS2 should increase the Plans flexibility. Increasing the likelihood of unallocated sites coming forward. This provides a level of certainty that might reduce economic impacts and the risk of the Plan being found unsound on grounds of inadequate provision for aggregates supply. <p>+</p> <p>+</p>

Table 9a - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate⁹

Sustainability Objectives	Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan	Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan		
	<ul style="list-style-type: none"> • However, the greater the number of aggregates sites developed, the greater the impact on environment and amenity. 	-	<ul style="list-style-type: none"> • However, having less sites identified in the Plan could possibly make it less responsive to sudden increases in demand. • Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. 	-
14. To adapt to and mitigate the impacts of climate change.	<ul style="list-style-type: none"> • Identifying more sites could cumulatively increase production of greenhouse gases, although the levels would be relatively small. • The greater the number of aggregates sites developed, the greater the impact on environment and amenity. 	-	<ul style="list-style-type: none"> • Identifying less sites could reduce production of greenhouse gases, although the levels would be relatively small. • The less the number of sites identified, the less the level of expected impact across the Plan area. 	+
	<ul style="list-style-type: none"> • Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. 	+	<ul style="list-style-type: none"> • Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. 	-
15. To minimise the negative impacts of waste and minerals development on the transport network, mitigating any residual impacts.	<ul style="list-style-type: none"> • Identifying a greater number of sites is likely to have the effect of increasing impacts on the transport network. Mitigation would reduce this to some extent. • The greater the number of aggregates sites developed, the greater the impact on environment and amenity. 	-	<ul style="list-style-type: none"> • Identifying fewer sites is likely to have the effect of reducing impacts on the transport network. • The fewer the number of aggregates sites developed, the less the impact on environment and amenity. 	+

Table 9a - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate⁹

Sustainability Objectives	Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan	Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan	
	<ul style="list-style-type: none"> Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. 	<p style="text-align: center;">+</p> <ul style="list-style-type: none"> Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. <p style="text-align: right;">-</p>	
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	<ul style="list-style-type: none"> Identifying greater or less numbers of sites is not expected to encourage or discourage the use of sustainable transport modes. 		?
17. To sustain the health and quality of life of the population.	<ul style="list-style-type: none"> A higher number of sites is likely to have greater impacts on local communities and the environment, and impacts on health. 	<p style="text-align: center;">-</p> <ul style="list-style-type: none"> Identifying/developing fewer sites is likely to have less impact on local communities and the environment. <p style="text-align: right;">+</p>	
	<ul style="list-style-type: none"> Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. 	<p style="text-align: center;">+</p> <ul style="list-style-type: none"> Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. <p style="text-align: right;">-</p>	
18. To enable safe access to countryside and open spaces.	<ul style="list-style-type: none"> The development of aggregate sites, particularly when worked and restored, has the potential to improve access to the countryside. The greater the number of sites developed, potentially the greater the benefits that may be received. 	<p style="text-align: center;">+</p> <ul style="list-style-type: none"> Developing fewer sites could result in less benefits being realised. Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. <p style="text-align: right;">-</p> <p style="text-align: right;">-</p>	

Table 9a - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate⁹

Sustainability Objectives	Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan	Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan
	<ul style="list-style-type: none"> Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply. 	
	<ul style="list-style-type: none"> However, greater numbers of sites can lead to greater impacts on communities and the environment, while sites are being worked and restored. 	-

<p>Conclusions</p>	<p>It is generally the case that identifying more sand and gravel sites increases the likelihood of environmental impacts. However, the Mineral Planning Authority is confident that the protection provided by the policies of the 2014 Minerals Strategy, along with national policy, is adequate to protect amenity and the environment.</p> <p>It does provide flexibility at the Examination, on the expectation that some of the sites may be removed. There is also no need to include all the sites in the Plan to be adopted.</p> <p>It also provides flexibility during the life of the Plan, if demand was to increase above a level that the allocated sites could meet or if one or more of the allocated were found at a later stage to be unsuitable for development.</p> <p>The Area of Search designation policy contains criteria to control when unallocated sites from the Area of Search might be approved.</p> <p>On the basis of these findings it is considered appropriate and sustainable to include an Area of Search, provided the conditions under which an unallocated site from within the Area of Search may be developed is carefully controlled.</p> <p><u>Updated Conclusion</u></p>
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Table 9a - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate⁹

Sustainability Objectives	Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan	Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan
	<p>The modifications proposed to MS2 should increase the Plans flexibility. Increasing the likelihood of unallocated sites coming forward if there is a need. This provides a level of certainty that might reduce the risk of the Plan being found unsound on grounds of inadequate provision for aggregates supply.</p> <p>The modified policy does not change the conclusion. It is appropriate to include a non-allocated sites Policy, provided that the conditions under which an unallocated site may be developed is carefully controlled.</p>	

Establishing Aggregate Demand

- 6.29. Consideration has also been given to the various options for establishing the basis for aggregate demand. The National Planning Policy Framework July 2018 (para.207) states that mineral planning authorities should plan for a steady and adequate supply of aggregate minerals (sand and gravel and crushed rock) by preparing an annual Local Aggregates Assessment (LAA) based on a rolling average of 10 years sales data and other relevant local information.
- 6.30. National Planning Practice Guidance (March 2014) further clarifies that LAAs should contain a forecast of demand for aggregates based on both the rolling average of 10-years sales data and other relevant local information.
- 6.31. However, there are other options for generating an indication of aggregate demand. Factors which could have an influence on future demand include:
- a. general growth in the economy (as measured by GVA)
 - b. demand for new housing
 - c. undertaking major new infrastructure projects requiring large amounts of aggregate
 - d. general growth in population could also be a factor
 - e. possible supply constraints affecting areas from which sand and gravel is sourced
- 6.32. All these approaches have some disadvantages, mainly arising out of the lack of a reliable, direct and quantifiable link between the factor and demand for aggregate. In seeking to identify a method, it is also important to bear in mind the potential for 'double counting' of growth factors. For example any demand projected from growth in population would overlap with growth in demand projected from increased housing completions and the latter, together with other infrastructure projects, with GVA growth in the construction sector.
- 6.33. Linking aggregates demand directly to population growth is unlikely to be robust as the available information does not present a clear picture of the scale and nature of any inter-relationship. There is no clear signal from current planned specific infrastructure projects over the time period to 2030 and it is concluded that this should be viewed as a neutral influence on aggregate demand.
- 6.34. Whilst it may be expected that there will be some connection between GVA growth and demand for aggregate the nature of the inter-relationship is not clear and GVA is difficult to forecast with any confidence over the timeframe of the Plan. On the other hand such a method has the benefit of relative simplicity and may fit, certainly in the near to mid-term, with the wider economic picture as the economy emerges from recession and construction activity increases.
- 6.35. Linking demand for aggregate with the scale of future housing requirements has advantages, as there is a direct link between house building and demand for aggregate and the proposed rate of house building can be projected over the plan period. On the other hand the quantitative relationship between house building and requirements for aggregate is not clear and there may be uncertainties over the numbers of houses planned to be built in the market areas served by the Mineral Planning Authority in question.
- 6.36. Any method will therefore need to rely on a number of assumptions and it is considered that there may be risks involved in adopting an overly sophisticated approach. The NPPF requires that account should be taken of 10 year historic sales and other relevant local information. It is therefore considered to be appropriate to take a balanced view based on a range of information, including 10 year historic sales, in identifying the level of demand to be planned for. This is the approach taken in the preparation of annual Local Aggregates Assessments.
- 6.37. The figure identified in the Local Aggregates Assessment is used as the annual provision figure in establishing the landbank.

Including an Aggregates Area of Search

- 6.38. Policy MS-2 of the Pre-Submission Draft Mineral Sites Plan designated a Sand and Gravel Area of Search (AOS). The purpose of this was to enable the MPA to permit the development of unallocated sites within the AOS should there be a shortfall in sand and gravel supply. The policy also required the potential developers of any such site to:
- demonstrate that there is a shortfall in the supply of sand and gravel
 - that the shortfall cannot be met from existing sites and/or new sites allocated through Policy MS-1 of the emerging Mineral Sites Plan
 - there are no permitted sand and gravel reserves capable of being worked but not currently being worked in the vicinity of the site that could be used to meet the identified shortfall and
 - the development of the unallocated site/sites does not prevent or disadvantage any allocated sites in coming forward and
- 6.39. In addition to permitting unallocated sites where there is a demonstrable shortfall in supply, this approach would have enabled the MPA to also permit unallocated sites in the AOS where the development of such sites could be shown to result in significant environmental gains which deliver a net environmental benefit provided they would not delay or otherwise prejudice the development of sites allocated through the MSP.
- 6.40. The benefits of including the Area of Search in the Draft Mineral Sites Plan was that it offered greater flexibility in meeting demand, should there be a constraint to supply or a sharp increase in demand that cannot be met by the allocated sites. However, there is an element of planning blight for the areas covered by the Area of Search as there is an increased likelihood that any part of the Area of Search is more likely to be developed.
- 6.41. The AOS was discussed at the examination hearings with concern shown by the mineral industry that the AOS did not represent the best approach in that opportunities may be missed, and areas contained within the AOS did not contain viable reserves. As a result, it was proposed to modify the plan. The proposed modification removes reference to the AOS and replaces it with a policy for dealing with unallocated sites within the resource blocks as established through the Minerals Strategy 2014.

7. Policy Appraisal

Background.

- 7.1. There were 9 policies in the Pre-Submission Mineral Sites Plan, numbered MS-1 through MS-9. **A modification is proposed to remove Policy MS5 'Sites for the provision of Ball Clay' and the successive policies will be re-numbered accordingly.** Policies MS-1 through MS-7 of the Pre-Submission Plan relate to the provision of mineral sites. Although individual sustainability appraisal assessments have been carried out for all the site nominations, an appraisal of the individual policies has been undertaken in this final report. See Table 10a.
- 7.2. Policy MS-2 is an exception to this in that it does not specifically allocate individual sites, but instead allocated an Aggregates Area of Search where aggregate sites not specifically allocated could be permitted provided certain criteria are met. As explained earlier, modifications to this approach arose through the examination hearing sessions. The modified policy relies on the resource blocks to address any needs that cannot be met through the allocation.
- 7.3. Policy MS-8 covers the designation of the Puddletown Road Area, an area incorporating the Puddletown Road and surrounding areas. It is intended to facilitate heathland restoration and coherent and long-term site development, management and restoration, with benefits to the environment and to local amenity. A modification is proposed to this policy to provide landowners/developers with an opportunity to cooperate over the detailed design and implementation of restoration and/or future development proposals.
- 7.4. Policy MS-9 relates to safeguarding of mineral sites and infrastructure, developing the provisions of the safeguarding policies in the Minerals Strategy and requiring District/Borough authorities to consult Dorset County Council as Mineral Planning Authority if mineral sites/infrastructure might be threatened by encroaching built development. It is intended to maintain an adequate and appropriate separation between minerals development and built development, and minimise impacts due to encroachment. Several modifications are proposed to this policy to provide additional clarification.
- 7.5. The policies are assessed using the 16 sustainability objectives identified through the Sustainability Appraisal Scoping Report and set out in Tables 10a and b of this report. The table has been updated to reflect the proposed modifications and an updated conclusion is provided as appropriate. Given the substantial revision, an additional SA of the revised policy MS2 has been added to Table 10b. The modified Policies are worded as follows:

Policy MS-1: Production of Sand and Gravel

An adequate and steady supply of sand and gravel will be maintained through a combination of the following:

- A. The continued provision of sand and gravel from the remaining ~~permitted~~ reserves at ~~permitted sites. the following sites.~~
 - a. ~~Binnegar Quarry~~
 - b. ~~Dorey's Pit~~
 - c. ~~Hines Pit~~
 - d. ~~Hyde Pit~~
 - e. ~~Hurn Court Farm~~
 - f. ~~Master's Pit~~
 - g. ~~Trigon Hill~~
 - h. ~~Tatchell's Quarry~~
 - i. ~~Chard Junction Quarry~~

~~j. Henbury Pit~~

~~k. Woodsford Quarry~~

~~l. Moreton Pit~~

~~B. Provision of sand and gravel from the following permitted site, should it be developed during the lifetime of the plan:~~

~~a. Avon Common~~

~~B. The following new sites and extensions to existing sites, as identified on the Policies Map, are allocated to contribute to the adequate and steady supply of sand and gravel, provided that the applicant can in each case demonstrate that the proposal is in accordance with the development plan:~~

~~i. AS06 Great Plantation, Puddletown Road, East Stoke Bere Regis - approximately 2,000,000 tonnes of primarily Poole Formation sand (AS-06 – See Submission Policies Map – Inset 7)~~

~~ii. b. Hurn Court Farm Quarry Extension, Hurn – approximately 600,000 tonnes (AS-09 – see Submission Policies Map – Inset 9)~~

~~iii. c. Philliol's Farm, Hyde – approximately 1,500,000 tonnes (AS-12 – see Submission Policies Map – Inset 4)~~

~~ii. AS13 Roeshot Quarry Extension, Christchurch - approximately 3,500,000 tonnes of primarily River Terrace aggregate (AS-13 see Submission Policies Map – Inset 10)~~

~~iii. AS15 Tatchell's Quarry Extension, Wareham - approximately 330,000 tonnes of primarily sand (AS-15 – see Submission Policies Map – Inset 6)~~

~~iv. AS19 Woodsford Quarry Extension, Woodsford - approximately 2,100,000 tonnes of primarily River Terrace aggregates (AS-19 – see Submission Policies Map – Inset 1)~~

~~v. AS25 Station Road, Moreton - approximately 3,100,000 tonnes comprising River Terrace and Poole Formation aggregate (AS-26 – See Submission Policies Map – Inset 2)~~

~~vi. AS26 Hurst Farm, Moreton - approximately 3,300,000 tonnes comprising River Terrace and Poole Formation aggregate (AS-26 – see Submission Policies Map – Inset 2)~~

~~vii. AS27 Land at Horton Heath, Horton - approximately 3,500,000 tonnes comprising primarily Bagshot Sand with some gravel~~

~~Any proposal for the development of any of these allocations must address the development considerations set out for each site in Appendix A, as well as any other matters relevant to the development of each proposed allocation, and demonstrate that any adverse impacts will be mitigated to the satisfaction of the Mineral Planning Authority.'~~

~~Proposals for the development of these allocations must be able to demonstrate that any cumulative impacts associated with their development and operation are capable of mitigation to a level acceptable to the Mineral Planning Authority.~~

~~C. Proposals within the allocated sites for the proposed development, as set out in Appendix A, will be permitted where they meet all of the following criteria:~~

~~i. They address the Development Guidelines set out for each site in Appendix A of this Plan, as well as any other matters relevant to the development of each proposed allocation; and~~

~~ii. They demonstrate that any adverse impacts, including cumulative impacts, associated with their development and operation will be mitigated to the satisfaction of the Mineral Planning Authority, and;~~

~~iii. Proposals for the development of these allocations will only be considered where it has been demonstrated must demonstrate that possible effects (including those related to hydrology, displacement of recreation, species, proximity, land management and restoration) that might~~

arise from their development would not adversely affect the integrity of European and Ramsar sites either alone or in combination with other plans or projects; implementation of the full range of mitigation measures as identified through Habitats Regulations Assessment Screening and listed under the Development Guidelines in Appendix A of this Plan will be a key element in meeting these requirements.

Habitats Regulations Appraisal screening indicates that development at AS-06 Great Plantation may have significant effects on species, proximity and displacement of recreation in particular, development at AS12 Philliol's Farm may have significant effects on displacement of recreation and species in particular and , development at AS-13 Roeshot Quarry Extension may have significant effects on species in particular and development at AS27 Land at Horton Heath may have significant effects on hydrology and displacement of recreation in particular. In each of these cases development proposals must either mitigate these effects or reduce them to non-significant levels in order for any development to take place.

Policy MS-2: Sand and Gravel Area of Search has been deleted and replaced with:

Policy MS-2: Unallocated sand and gravel sites

- A. Proposals for sand or gravel extraction from unallocated sites within the Superficial and Bedrock Aggregate Resource Blocks, as shown on the Policies Map, will only be permitted where they meet all of the following criteria:
- i. There is a demonstrable shortfall in supply (determined through assessing the size of the landbank and the existing and/or projected level of demand), particularly if a site proposal contributes to meeting a shortfall in a specific type of aggregate; or unless it involves prior extraction of sand and gravel in advance of non-mineral development where this would avoid the permanent sterilisation of safeguarded minerals;
 - ii. The proposed development would not delay or otherwise prejudice (including through causing or resulting in unacceptable cumulative impacts) the development of allocated or permitted site(s) particularly where these have the potential to produce the same specific type of aggregate mineral and which would serve the same geographic market;
 - iii. In all cases any adverse impacts must be mitigated to the satisfaction of the Mineral Planning Authority;
 - iv. Sites will only be considered where it has been demonstrated that possible effects (including those related to hydrology, displacement of recreation, species, proximity, land management and restoration) that might arise from their development would not adversely affect the integrity of European and Ramsar sites either alone or in combination with other plans or projects; and
 - v. Applications for sites proposed for development which lie within an Aerodrome Safeguarding Area, as defined on the Policies Map, must undertake, in consultation with the relevant airport, and submit an Aviation Impact Assessment.

MS-3: Swanworth Quarry Extension

An extension to Swanworth Quarry in Purbeck (PK16 - see Submission Policies Map - Inset 11 as identified on the Policies Map) is allocated to contribute to the adequate and steady supply of crushed rock.

Any proposal for the development of this allocation must address the development considerations guidelines set out for the site in Appendix A, with particular emphasis on landscape and visual impacts on the Area of Outstanding Natural Beauty as well as any other matters relevant to the development of the allocation, and demonstrate that any adverse impacts will be mitigated to the satisfaction of the Mineral Planning Authority.

Should the proposed development result in adverse landscape and visual impacts that cannot be avoided or adequately mitigated, compensatory environmental enhancements will be required to offset the residual landscape and visual impacts.

This proposed development will only be considered where it has been demonstrated that possible effects (including those related to hydrology, displacement of recreation, species, proximity, land management and restoration) that might arise from their development would not adversely affect the integrity of European and Ramsar sites, either alone or in combination with other plans or projects.

MS-4: Site for the provision of recycled aggregate

Land at White's Pit in Poole (RA-01 - ~~see Submission Policies Map – Inset 8 as identified on Policies Map~~) is suitable for aggregates recycling and will make a significant contribution to the steady supply of recycled aggregate.

The use of this site for the production of recycled aggregates, whether through consolidation of existing operations or by other means, shall not result in any net increase in adverse impact upon the openness of the Green Belt.

All relevant development ~~guidelines considerations~~, including those set out in Appendix A, must be fully addressed and any adverse impacts will be mitigated to the satisfaction of the Mineral Planning Authority.

In addition, it must be demonstrated that possible effects (including those related to hydrology, displacement of recreation, species, proximity, land management and restoration) that might arise from the ongoing development of this site would not adversely affect the integrity of European and Ramsar sites, either alone or in combination with other plans or projects.

MS-5: Site for the provision of Ball Clay – Policy has been deleted due to planning permission being granted for the allocated site.

MS-6 ~~5~~: Sites for the provision of Purbeck Stone

An adequate and steady supply of Purbeck Stone will be maintained through a combination of the following:

1. The continued provision of stone from ~~the~~ remaining permitted reserves ~~at the following sites~~:
 - a. ~~Downs Quarry, Worth Matravers~~
 - b. ~~South Downs Quarry, Worth Matravers~~
 - c. ~~Quarry 4, Acton, Langton Matravers~~
 - d. ~~Landers and Fratton Quarry, Worth Matravers~~
 - e. ~~Belle Vue Quarry, Swanage~~
 - f. ~~Southard Quarry, Swanage~~
 - g. ~~St. Aldholms Quarry, Worth Matravers~~
 - h. ~~California Quarry, Swanage~~
 - i. ~~Blacklands Quarry, Langton Matravers~~
 - j. ~~Keates Quarry, Langton Matravers~~
 - k. ~~Homefield 1, Langton Matravers~~
 - l. ~~Homefield 2, Langton Matravers~~

2. The provision of stone from the following allocations of new sites and extensions to existing sites, as shown on the Policies Map, provided that the applicant can in each case demonstrate that the proposal is in accordance with the development plan:
 - a. PK02 Blacklands Quarry Extension, Langton Matravers (~~PK-02 – see Submission Policies Map – Inset 16~~)
 - b. PK10 Southard Quarry, Swanage (~~PK-10 – see Submission Policies Map – Inset 18~~)
~~Downs Quarry Extension, Langton Matravers (PK-15 – see Submission Policies Map – Inset 12)~~
 - c. PK17 Home Field, Acton (~~PK-17 – see Submission Policies Map – Inset 15~~)
 - d. PK18 Quarry 4 Extension, Acton (~~PK-18 – see Submission Policies Map – Inset 17~~)
 - e. PK19 Broadmead Field, Langton Matravers (~~PK-19 – see Submission Policies Map – Inset 14~~)
~~Gallows Gore, Harmans Cross (PK-21 – see Submission Policies Map – Inset 13)~~

Any proposals for the development of these allocations must address the development guidelines set out for each site in Appendix A, with particular emphasis on landscape and visual impacts on the Area of Outstanding Natural Beauty, as well as any other matters relevant to the development of the allocations, and demonstrate that any adverse impacts, including cumulative impacts, will be mitigated to the satisfaction of the Mineral Planning Authority.

Proposals for development of these allocations will only be considered where it has been demonstrated that possible effects (including those related to hydrology, displacement of recreation, species, proximity, land management and restoration) that might arise from their development would not adversely affect the integrity of European and Ramsar sites, either alone or in combination with other plans or projects.

MS-7 6: Sites for the provision of other building stone (excluding Portland and Purbeck Stone)

The following extensions to existing sites, as identified on the Policies Map, are allocated, ~~provided that the applicant can in each case demonstrate that the proposal is in accordance with the development plan~~, to contribute to the supply of building stone:

- i. BS02 Marnhull Quarry, Marnhull (producing Todber Freestone) (~~BS-02 – see Submission Policies Map – Inset 21~~)
- ii. BS04 Frogden Quarry, Osborne (producing Inferior Oolite) (~~BS-04 – see Submission Policies Map – Inset 20~~)
- iii. BS05 Whithill Quarry, Lillington (producing forest Marble) (~~BS-05 – see Submission Policies Map – Inset 19~~)

Any proposal for the development of any of these allocations must address the development guidelines considerations set out for each site in Appendix A, as well as any other matters relevant to the development of each proposed allocation, and demonstrate that any adverse impacts will be mitigated to the satisfaction of the Mineral Planning Authority.

Policy MS-8 7: Puddletown Road Area Policy

Within the Puddletown Road Area as shown on the Policies Map and in Figure 8, the Mineral Planning Authority will work with operators, landowners, Natural England and the Local Nature Partnership to secure a consistent and coordinated approach to the development, working and restoration of land permitted for mineral development.

This consistent and coordinated approach will:

- i. create a coherent and resilient ecological network, with primary emphasis on restoration of heathland and acid grassland;

- ii. support the management objectives of the Heath/Forest Mosaic Landscape Type;
- iii. avoid or minimise adverse transport, environmental or amenity impacts arising from mineral workings;
- iv. maximise opportunities for biodiversity gains, including through effective and timely restoration of lowland heath and associated habitats and linking restored sites with areas of nature conservation interest;
- v. secure cost-effective and long-term aftercare and management;
- vi. meet environmental and compatible recreational objectives in the area.
- vii. provide landowners/developers with the opportunity to cooperate over the detailed design and implementation of restoration and/or future development proposals

Development, restoration, management or other activities will only be undertaken where it can be demonstrated that any possible effects that might result will not adversely affect the integrity of European and Ramsar sites, either alone or in combination with other plans or projects.

Policy MS-9 8: Preventing Land-Use Conflict

The mineral sites and associated infrastructure that support the supply of minerals in Bournemouth, Christchurch, Poole and Dorset Dorset and Poole, as listed and illustrated in Appendix B of this Plan, are safeguarded against development that could unnecessarily sterilise the sites and infrastructure, or prejudice or jeopardise their use, by creating incompatible land uses nearby. This list of safeguarded sites will be updated regularly through monitoring of the Mineral Strategy and the Mineral Sites Plan.

Consultation areas of 250 metres are designated around safeguarded mineral sites and infrastructure. District and Borough Councils within Dorset will consult the mineral planning authority on The Local planning Authority will consider proposals for non-minerals development partly or wholly within these consultation areas against the relevant safeguarding policies of the Minerals Strategy and/or the Mineral Sites Plan.

Table 10a - Sustainability appraisal of Policies MS-1,MS-3, MS-4, ~~MS-5~~, MS-6 5 and MS7 6.

Table 10a – Sustainability appraisal of Policies MS-1,MS-3, MS-4, MS-5, MS-6 <u>5</u> and MS7 <u>6</u>.						
Sustainability Objectives	Policy MS-1: Production of Sand and Gravel	Policy MS-3: Swanworth Quarry Extension	Policy MS-4: Sites for the provision of recycled aggregates	MS-5: Site for the provision of Ball Clay (Policy removed)	MS-6: Sites for the provision of Purbeck Stone	MS-7: Sites for the provision of other building Stone (excluding Portland and Purbeck Stone)
1. To move waste management up the waste hierarchy and promote net self sufficiency	Not relevant to this policy.		This policy allows for ongoing provision of capacity for aggregates recycling.	Not relevant to this policy.		

Table 10a – Sustainability appraisal of Policies MS-1,MS-3, MS-4, ~~MS-5~~, MS-6 5 and MS7 6.

Sustainability Objectives	Policy MS-1: Production of Sand and Gravel	Policy MS-3: Swanworth Quarry Extension	Policy MS-4: Sites for the provision of recycled aggregates	MS-5: Site for the provision of Ball Clay (Policy removed)	MS-6: Sites for the provision of Purbeck Stone	MS-7: Sites for the provision of other building Stone (excluding Portland and Purbeck Stone)
2. To maintain, conserve and enhance biodiversity	<p>Negative/Positive – The provision of sites may impact on biodiversity during extraction. However, benefits can arise through effective site management and restoration. Specific protection is included within the policy for European and Ramsar sites.</p> <p>A modification is proposed to make specific reference to mitigation measures listed in the development guidelines for each site allocation.</p>	<p>Negative/Positive – The extension of Swanworth may impact on biodiversity during extraction. However, benefits can arise through effective site management and restoration. Specific protection is included within the policy for European and Ramsar sites.</p>	<p>Negative – Ongoing operation of White’s Pit may impact on biodiversity. However, specific protection is included within the policy for European and Ramsar sites.</p>	<p>Negative/Positive – The extension of Trigon Hill may impact on biodiversity during extraction. However, benefits can arise through effective site management and restoration. Specific protection is included within the policy for European and Ramsar sites.</p>	<p>Negative/Positive – The provision of sites may impact on biodiversity during extraction. However, benefits can arise through effective site management and restoration. Specific protection is included within the policy for European and Ramsar sites.</p>	<p>Negative/Positive – The provision of sites may impact on biodiversity during extraction. However, benefits can arise through effective site management and restoration.</p>
3. To maintain, conserve and	Neutral – sand and gravel quarries not particularly	Positive – there is potential for small-	Neutral – this policy not specifically	Neutral/Positive - Exposures resulting from working may	Positive – there is potential for small-	Positive – there is potential for small-

Table 10a – Sustainability appraisal of Policies MS-1,MS-3, MS-4, ~~MS-5~~, MS-6 5 and MS7 6.

Sustainability Objectives	Policy MS-1: Production of Sand and Gravel	Policy MS-3: Swanworth Quarry Extension	Policy MS-4: Sites for the provision of recycled aggregates	MS-5: Site for the provision of Ball Clay (Policy removed)	MS-6: Sites for the provision of Purbeck Stone	MS-7: Sites for the provision of other building Stone (excluding Portland and Purbeck Stone)
enhance geodiversity.	beneficial to geodiversity..	scale geological exposures.	relevant to this Objective.	be of interest. But are likely to be obscured or covered as part of restoration.	scale geological exposures.	scale geological exposures.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	Neutral – development of sites, as facilitated by these policies, is expected to be carried out in such a way that impacts on the water environment will be fully mitigated.					
5. To reduce flood risk and improve flood management.	Neutral – No specific benefits are expected from the development of additional sites or extensions to existing sites.					
6. To maintain, conserve and enhance the historic environment	Negative/Neutral – it is acknowledged that development may have some impact on the historic environment. However, development facilitated by this policy would go through the normal assessments	Neutral – this policy not specifically relevant to this Objective.	Negative/Neutral – it is acknowledged that development may have some impact on the historic environment. However, development facilitated by this policy would go through the			

Table 10a – Sustainability appraisal of Policies MS-1,MS-3, MS-4, ~~MS-5~~, MS-6 5 and MS7 6.

Sustainability Objectives	Policy MS-1: Production of Sand and Gravel	Policy MS-3: Swanworth Quarry Extension	Policy MS-4: Sites for the provision of recycled aggregates	MS-5: Site for the provision of Ball Clay (Policy removed)	MS-6: Sites for the provision of Purbeck Stone	MS-7: Sites for the provision of other building Stone (excluding Portland and Purbeck Stone)
(including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).	to ensure no unacceptable impacts on the historic environment.			normal assessments to ensure no unacceptable impacts on the historic environment.		
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	Negative/Neutral – it is acknowledged that development may have some impact on the landscape. However, development facilitated by this policy would go through the normal assessments to ensure no	Negative/Neutral – it is acknowledged that development may have some impact on the landscape. However, development facilitated by this policy would go through the normal assessments to ensure no	Neutral – this policy not specifically relevant to this Objective.	Negative/Neutral – it is acknowledged that development may have some impact on the landscape. However, development facilitated by this policy would go through the normal assessments to ensure no	Negative/Neutral – it is acknowledged that development may have some impact on the landscape. However, development facilitated by this policy would go through the normal assessments to ensure no	Negative/Neutral – it is acknowledged that development may have some impact on the landscape. However, development facilitated by this policy would go through the normal assessments to ensure no

Table 10a – Sustainability appraisal of Policies MS-1,MS-3, MS-4, ~~MS-5~~, MS-6 5 and MS7 6.

Sustainability Objectives	Policy MS-1: Production of Sand and Gravel	Policy MS-3: Swanworth Quarry Extension	Policy MS-4: Sites for the provision of recycled aggregates	MS-5: Site for the provision of Ball Clay (Policy removed)	MS-6: Sites for the provision of Purbeck Stone	MS-7: Sites for the provision of other building Stone (excluding Portland and Purbeck Stone)
	<p>unacceptable impacts.</p> <p>Positive – some benefits may arise in the longer term through site restoration.</p>	<p>unacceptable impacts.</p> <p>A modification is proposed to ensure that compensation will be required where adverse impacts cannot be avoided or adequately mitigated.</p>		<p>unacceptable impacts.</p> <p>Positive – some benefits may arise in the longer term through site restoration.</p>	<p>unacceptable impacts.</p> <p>Positive – some benefits may arise in the longer term through site restoration.</p>	<p>unacceptable impacts.</p> <p>Positive – some benefits may arise in the longer term through site restoration.</p> <p>A modification is proposed to highlight that quarrying provides opportunities to carry out landscape scale management and restoration.</p>
<p>8. To protect and improve air quality and reduce the impacts of noise.</p>	<p>Neutral – Minerals development facilitated by this policy would go through the normal assessments to ensure no unacceptable impacts on air</p>	<p>Neutral – Minerals development facilitated by this policy would go through the normal assessments to ensure no unacceptable impacts on air</p>	<p>Neutral – this is an existing facility; ongoing production of recycled aggregates should not give rise to unacceptable impacts.</p>	<p>Neutral – Minerals development facilitated by this policy would go through the normal assessments to ensure no unacceptable impacts on air</p>	<p>Neutral – Minerals development facilitated by this policy would go through the normal assessments to ensure no unacceptable impacts on air</p>	<p>Neutral – Minerals development facilitated by this policy would go through the normal assessments to ensure no unacceptable impacts on air</p>

Table 10a – Sustainability appraisal of Policies MS-1,MS-3, MS-4, ~~MS-5~~, MS-6 5 and MS7 6.

Sustainability Objectives	Policy MS-1: Production of Sand and Gravel	Policy MS-3: Swanworth Quarry Extension	Policy MS-4: Sites for the provision of recycled aggregates	MS-5: Site for the provision of Ball Clay (Policy removed)	MS-6: Sites for the provision of Purbeck Stone	MS-7: Sites for the provision of other building Stone (excluding Portland and Purbeck Stone)
	quality or local amenity.	quality or local amenity.		quality or local amenity.	quality or local amenity.	quality or local amenity.
9. To maintain, conserve and enhance soil quality.	Neutral/Negative – Minerals development is unlikely to conserve and enhance soil quality. However, development would go through the normal assessments to ensure no unacceptable impacts on soil quality.	Neutral/Negative – Minerals development is unlikely to conserve and enhance soil quality. However, development would go through the normal assessments to ensure no unacceptable impacts on soil quality.	Neutral – this policy not specifically relevant to this Objective.	Neutral/Negative – Minerals development is unlikely to conserve and enhance soil quality. However, development would go through the normal assessments to ensure no unacceptable impacts on soil quality.	Neutral/Negative – Minerals development is unlikely to conserve and enhance soil quality. However, development would go through the normal assessments to ensure no unacceptable impacts on soil quality.	Neutral/Negative – Minerals development is unlikely to conserve and enhance soil quality. However, development would go through the normal assessments to ensure no unacceptable impacts on soil quality.
10. To conserve and safeguard mineral resources.	Negative – this policy facilitates further development of mineral resources.		Positive – the ongoing production of recycled aggregate may reduce the need for mineral resources.	Negative – these policies facilitate further development of mineral resources.		

Table 10a – Sustainability appraisal of Policies MS-1,MS-3, MS-4, ~~MS-5~~, MS-6 5 and MS7 6.

Sustainability Objectives	Policy MS-1: Production of Sand and Gravel	Policy MS-3: Swanworth Quarry Extension	Policy MS-4: Sites for the provision of recycled aggregates	MS-5: Site for the provision of Ball Clay (Policy removed)	MS-6: Sites for the provision of Purbeck Stone	MS-7: Sites for the provision of other building Stone (excluding Portland and Purbeck Stone)
11. To promote the use of alternative materials.	Negative – this policy facilitates further development of mineral resources.		Positive – the ongoing production of recycled aggregate promotes the use of alternative materials.	Negative – this policy facilitates further development of mineral resources.		
12. To provide an adequate supply of minerals to meet society's needs.	Positive – these policies will facilitate the provision of mineral helping to ensure an adequate supply.					
13. To encourage sustainable economic growth	Positive – these policies are intended to facilitate the development of quarries and an aggregates recycling facility, with associated economic benefits. In addition the development of new quarries and extension to existing facilities maintains and provides jobs, albeit in limited numbers.					
14. To adapt to and mitigate the impacts of climate change.	Neutral/Negative – this policy facilitates new quarries and an aggregates recycling facility. These will produce greenhouse gases – although the amount that could be produced will be relatively small. Policy CC1 requires that developers include a report on how climate change impacts have been considered and mitigated against.					

Table 10a – Sustainability appraisal of Policies MS-1,MS-3, MS-4, ~~MS-5~~, MS-6 5 and MS7 6.

Sustainability Objectives	Policy MS-1: Production of Sand and Gravel	Policy MS-3: Swanworth Quarry Extension	Policy MS-4: Sites for the provision of recycled aggregates	MS-5: Site for the provision of Ball Clay (Policy removed)	MS-6: Sites for the provision of Purbeck Stone	MS-7: Sites for the provision of other building Stone (excluding Portland and Purbeck Stone)
15. To minimise the negative impacts of waste and minerals development on the transport network, mitigating any residual impacts.	Negative – this policy facilitates new sand and gravel sites and these will have impacts on the transport network.	Neutral/Positive – this is an existing quarry. An extension will not see additional vehicle movements. In addition, continuing production from Swanworth will ensure that vehicle miles associated with crushed rock production aren't increased around the county.	Neutral – ongoing production will not increase impacts of transportation. The loss of this site may result in increased vehicle miles.	Neutral/Positive – this is an existing quarry. An extension will not see additional vehicle movements.	Negative/Neutral – this policy facilitates new quarries which will have impacts on the transport network. However, many of the quarries proposed are extensions to existing facilities or will replace existing facilities. Therefore any increase in vehicle movements may be minimal.	Neutral –quarries proposed through this policy are extensions to existing sites. Therefore any increases in vehicle movements are likely to be minimal.

Table 10a – Sustainability appraisal of Policies MS-1,MS-3, MS-4, ~~MS-5~~, MS-6 5 and MS7 6.

Sustainability Objectives	Policy MS-1: Production of Sand and Gravel	Policy MS-3: Swanworth Quarry Extension	Policy MS-4: Sites for the provision of recycled aggregates	MS-5: Site for the provision of Ball Clay (Policy removed)	MS-6: Sites for the provision of Purbeck Stone	MS-7: Sites for the provision of other building Stone (excluding Portland and Purbeck Stone)
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	Neutral – these policies are not specifically relevant to this Objective.					
17. To sustain the health and quality of life of the population.	Negative/Positive – The provision of sites may impact on people during extraction. However, benefits can arise through effective site management and restoration. The allocation of sites has involved a rigorous process of assessment in order to allocate a	Positive – this policy is intended to improve the development, management and restoration of sites, all of which could benefit health and quality of life, particularly through approaches to restoration and the provision/improvement of access/recreational	Positive – this policy is intended to ensure that an appropriate separation remains between built development and minerals development – to the benefit of people living and working in areas where there is minerals development. The			

Table 10a – Sustainability appraisal of Policies MS-1,MS-3, MS-4, ~~MS-5~~, MS-6 5 and MS7 6.

Sustainability Objectives	Policy MS-1: Production of Sand and Gravel	Policy MS-3: Swanworth Quarry Extension	Policy MS-4: Sites for the provision of recycled aggregates	MS-5: Site for the provision of Ball Clay (Policy removed)	MS-6: Sites for the provision of Purbeck Stone	MS-7: Sites for the provision of other building Stone (excluding Portland and Purbeck Stone)
	suitable range of sites to meet the need for mineral resources.	facilities during/after working.	modifications proposed provide clarification regarding what facilities will be safeguarded.			
18. To enable safe access to countryside and open spaces.	Negative/Positive – there may be temporary loss of access to land during development. However, development and restoration can improve access to the countryside, particularly in the longer term.	Neutral – as nature conservation is a key element of this vision opportunities for recreation may be limited.	Neutral – opportunities may be limited as this is an existing facility.	Negative/Positive – there may be temporary loss of access to land during development. However, development and restoration can improve access to the countryside, particularly in the longer term.		

Conclusion	<p>These policies are intended to facilitate the development of quarries within allocated sites. This will provide economic benefits and ensure a steady supply of mineral.</p> <p>Polices that propose new minerals development may give rise to some level of impact. However, development would go through</p>
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Table 10a – Sustainability appraisal of Policies MS-1,MS-3, MS-4, ~~MS-5~~, MS-6 5 and MS7 6.

Sustainability Objectives	Policy MS-1: Production of Sand and Gravel	Policy MS-3: Swanworth Quarry Extension	Policy MS-4: Sites for the provision of recycled aggregates	MS-5: Site for the provision of Ball Clay (Policy removed)	MS-6: Sites for the provision of Purbeck Stone	MS-7: Sites for the provision of other building Stone (excluding Portland and Purbeck Stone)
<p>the normal assessments to ensure no unacceptable impacts arise. Appendix 1 of the Mineral Sites Plan contains detailed development guidelines for the development of all site allocations. These are intended to ensure that impacts are minimised to acceptable levels. Furthermore, these policies should be read in conjunction with Policies contained in the 2014 Minerals Strategy which provide protection to Dorset’s environment from mineral extraction.</p> <p>The sustainability appraisal indicates that policies generally perform well against the sustainability objectives and it is expected that these policies will be fit for purpose.</p> <p>No changes are considered necessary.</p> <p>Revised Conclusion</p> <p>The proposed modifications do not change the original conclusion.</p> <p>Additional protection is included within Policy MS-1 through the requirement to demonstrate that cumulative impacts have been mitigated.</p> <p>Policy MS-5 has been deleted due to planning permission being granted for extraction at Trigon.</p> <p>Within Policy MS6, reference to Downs Quarry has been removed, following grant of planning permission. Gallows Gore has also been removed from the policy following withdrawal by the site promotor.</p>						

Table 10b - Sustainability appraisal of Policies MS-2, MS-8 7 and MS-9 8.

Table 10b - Sustainability appraisal of Policies MS-2, MS-8 and MS-9.				
Sustainability Objectives	Policy MS-2: Sand and Gravel Area of Search (Policy Removed)	Policy MS-2 Unallocated Sand and Gravel Sites (Modified/New policy)	Policy MS-8 7: Puddletown Road Area Policy	Policy MS-9 8: Preventing Land -Use Conflict
1. To move waste management up the waste hierarchy and promote net self sufficiency	Not relevant to this policy.	Not relevant to this policy.	Not relevant to this policy.	Not relevant to this policy.
2. To maintain, conserve and enhance biodiversity	Positive – the Area of Search has been selected to minimise impacts on biodiversity.	Negative/Positive – The provision of sites may impact on biodiversity during extraction. However, benefits can arise through effective site management and restoration. Specific protection is included within the policy for European and Ramsar sites.	Positive – the policy is specifically intended to benefit biodiversity, through effective site management and restoration.	Neutral – this policy not specifically relevant to this Objective.
3. To maintain, conserve and enhance geodiversity.	Neutral – sand and gravel quarries not particularly beneficial to geodiversity.	Neutral – sand and gravel quarries not particularly beneficial to geodiversity.	Neutral/Positive – although this policy is not specifically intended to affect geodiversity, there could be benefits through improved management of the wider area.	Neutral – this policy not specifically relevant to this Objective.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage	Neutral – development of additional sites, as facilitated by this policy, is expected to be carried out in such a way that impacts on the water	Neutral – development of additional sites, as facilitated by this policy, is expected to be carried out in such a way that impacts on the water	Positive – through improved water management from longer-term site development, management and restoration.	Neutral – this policy not specifically relevant to this Objective.

Table 10b - Sustainability appraisal of Policies MS-2, MS-8 and MS-9.

Sustainability Objectives	Policy MS-2: Sand and Gravel Area of Search (Policy Removed)	Policy MS-2 Unallocated Sand and Gravel Sites (Modified/New policy)	Policy MS-8 7: Puddletown Road Area Policy	Policy MS-9 8: Preventing Land -Use Conflict
the consumption of water in a sustainable way.	environment will be fully mitigated.	environment will be fully mitigated.		
5. To reduce flood risk and improve flood management.	Neutral – flood risk and flood management	Neutral – flood risk and flood management	Positive – through improved management and restoration, which could affect the flow of water off the Puddletown Road ridge and into the Piddle and the Frome.	Neutral – this policy not specifically relevant to this Objective.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).	Neutral – Minerals development facilitated by this policy would go through the normal assessments to ensure no unacceptable impacts on the historic environment.	Neutral – Minerals development facilitated by this policy would go through the normal assessments to ensure no unacceptable impacts on the historic environment.	Positive – policy is not intended to directly affect the historic environment, but there are likely to be benefits to the historic environment (e.g. historic landscapes) from its application.	Neutral – this policy not specifically relevant to this Objective.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	Positive – the Area of Search has been selected to minimise impacts on landscape/visual impacts.	Negative/Neutral – it is acknowledged that development may have some impact on the landscape. However, development facilitated by	Positive – through improved management and restoration, which is expected to have a benefit on the landscape.	Neutral – this policy not specifically relevant to this Objective.

Table 10b - Sustainability appraisal of Policies MS-2, MS-8 and MS-9.

Sustainability Objectives	Policy MS-2: Sand and Gravel Area of Search (Policy Removed)	Policy MS-2 Unallocated Sand and Gravel Sites (Modified/New policy)	Policy MS-8 7: Puddletown Road Area Policy	Policy MS-9 8: Preventing Land -Use Conflict
		this policy would go through the normal assessments to ensure no unacceptable impacts.		
8. To protect and improve air quality and reduce the impacts of noise.	Neutral – Minerals development facilitated by this policy would go through the normal assessments to ensure no unacceptable impacts on air quality or local amenity.	Neutral – Minerals development facilitated by this policy would go through the normal assessments to ensure no unacceptable impacts on air quality or local amenity.	Neutral – policy is not intended to directly affect air quality/noise, but there could be benefits through improved management.	Positive – this policy offers increased control over the separation between built development and mineral sites and therefore can minimise air quality and noise impacts.
9. To maintain, conserve and enhance soil quality.	Neutral – Minerals development facilitated by this policy would go through the normal assessments to ensure no unacceptable impacts on soil quality.	Neutral – Minerals development facilitated by this policy would go through the normal assessments to ensure no unacceptable impacts on soil quality.	Neutral – policy is not intended to directly affect soil quality, but there could be benefits.	Neutral – this policy not specifically relevant to this Objective.
10. To conserve and safeguard mineral resources.	Negative – this policy facilitates further development of the sand and gravel resource.	Negative – this policy facilitates further development of the sand and gravel resource.	Neutral/Positive – considering the wider Puddletown Road area holistically is expected to lead to improved management and conservation of existing resources.	Positive – this policy will improve the safeguarding of mineral sites and infrastructure, contributing to the conservation and

Table 10b - Sustainability appraisal of Policies MS-2, MS-8 and MS-9.

Sustainability Objectives	Policy MS-2: Sand and Gravel Area of Search (Policy Removed)	Policy MS-2 Unallocated Sand and Gravel Sites (Modified/New policy)	Policy MS-8 7: Puddletown Road Area Policy	Policy MS-9 8: Preventing Land -Use Conflict
				safeguarding of the mineral resource. The modifications proposed provide clarification regarding what facilities will be safeguarded.
11. To promote the use of alternative materials.	Negative – this policy facilitates further development of the sand and gravel resource.	Negative – this policy facilitates further development of the sand and gravel resource.	Neutral/Negative - It is unlikely that this policy will promote the use of alternative materials.	Neutral – this policy not specifically relevant to this Objective.
12. To provide an adequate supply of minerals to meet society’s needs.	Positive – this policy will facilitate the provision of aggregates and help to ensure an adequate supply.	Positive – this policy will facilitate the provision of aggregates and help to ensure an adequate supply. Widening the policy scope to the resource blocks may provide advantages in terms of the provision of minerals.	Positive – this policy is intended to improve the planning and management of the Puddletown Road area, which will include future mineral provision. A modification has been proposed to allow landowners/developers an opportunity to cooperate in the design and implementation of restoration and future development proposals. This should facilitate the provision of a supply of minerals.	Positive – this policy will safeguard mineral sites and infrastructure, which is a key factor in ensuring future supply of minerals. The modifications proposed provide clarification regarding what facilities will be safeguarded.

Table 10b - Sustainability appraisal of Policies MS-2, MS-8 and MS-9.

Sustainability Objectives	Policy MS-2: Sand and Gravel Area of Search (Policy Removed)	Policy MS-2 Unallocated Sand and Gravel Sites (Modified/New policy)	Policy MS-8 7: Puddletown Road Area Policy	Policy MS-9 8: Preventing Land -Use Conflict
13. To encourage sustainable economic growth	Positive – this policy is intended to facilitate the development of aggregates quarries, with associated economic benefits, in locations of least biodiversity/landscape impact and where additional benefits environmental benefits will be realised.	Positive – this policy is intended to facilitate the development of aggregates quarries, with associated economic benefits.	Positive – the policy seeks to secure a consistent and coordinated approach to site working and development, intended to improve site development and benefit the economy. A modification has been proposed to allow landowners/developers an opportunity to cooperate in the design and implementation of restoration and future development proposals. This should facilitate the provision of minerals which will have economic benefits.	Positive – this policy is intended to minimise threats to on-going mineral production that could result from encroachment by built development. This should encourage both mineral development and built development to grow in a mutually sustainable manner. The modifications proposed provide clarification regarding what facilities will be safeguarded.
14. To adapt to and mitigate the impacts of climate change.	Neutral/Negative – this policy facilitates new sand and gravel sites and these will produce additional greenhouse gases – although the amount that could be produced will be relatively small.	Neutral/Negative – this policy facilitates new sand and gravel sites and these will produce additional greenhouse gases – although the amount that could be produced will be relatively small.	Positive – working and restoration both have an influence on climate change. This is particularly true for restoration, where the environment created/re-created after working can provide for adaptation or mitigation of impacts of climate change e.g. through opportunities for water storage and management, flood water storage, the	Neutral – this policy not specifically relevant to this Objective.

Table 10b - Sustainability appraisal of Policies MS-2, MS-8 and MS-9.

Sustainability Objectives	Policy MS-2: Sand and Gravel Area of Search (Policy Removed)	Policy MS-2 Unallocated Sand and Gravel Sites (Modified/New policy)	Policy MS-8 7: Puddletown Road Area Policy	Policy MS-9 8: Preventing Land -Use Conflict
			creation of new areas of vegetation and habitats to absorb carbon and the provision of green spaces.	
15. To minimise the negative impacts of waste and minerals development on the transport network, mitigating any residual impacts.	Negative – this policy facilitates new sand and gravel sites and these will have impacts on the transport network.	Negative – this policy facilitates new sand and gravel sites and these will have impacts on the transport network.	Neutral – policy is not intended to directly affect transport issues and mitigate impacts, but there could be benefits depending on how the site is developed and managed.	Neutral – this policy not specifically relevant to this Objective.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	Neutral – this policy not specifically relevant to this Objective.	Neutral – this policy not specifically relevant to this Objective.	Neutral - it is unlikely that this policy will affect transport arrangements associated with site development.	Neutral – this policy not specifically relevant to this Objective.
17. To sustain the health and quality of life of the population.	Positive – although not specifically focussed on this Objective, locating new quarries in areas of less visual impacts will contribute to quality of life.	Neutral – Minerals development facilitated by this policy would go through the normal assessments to ensure no unacceptable impacts on quality of life.	Positive – this policy is intended to improve the development, management and restoration of sites, all of which could benefit health and quality of life, particularly through approaches to restoration and the provision/improvement of access/recreational facilities during/after working.	Positive – this policy is intended to ensure that an appropriate separation remains between built development and minerals development – to the benefit of people living and working in areas where there is

Table 10b - Sustainability appraisal of Policies MS-2, MS-8 and MS-9.

Sustainability Objectives	Policy MS-2: Sand and Gravel Area of Search (Policy Removed)	Policy MS-2 Unallocated Sand and Gravel Sites (Modified/New policy)	Policy MS-8 7: Puddletown Road Area Policy	Policy MS-9 8: Preventing Land -Use Conflict
				minerals development. The modifications proposed provide clarification regarding what facilities will be safeguarded.
18. To enable safe access to countryside and open spaces.	Positive – site development and restoration can improve access to the countryside. The more sites developed, potentially the greater the benefits resulting	Positive – site development and restoration can improve access to the countryside. The more sites developed, potentially the greater the benefits resulting	Positive – this policy is intended to improve recreational opportunities, through appropriate site development, management and restoration. Taking a coordinated approach to site development/management/restoration could offer improved opportunities for access during working and restoration.	Positive – this policy is intended to maintain appropriate open space around minerals sites – this open space can be used to maintain/provide public access to countryside, especially if the minerals development is close to the edge of urban areas. The modifications proposed provide clarification regarding what facilities will be safeguarded.
Original Conclusion (September 2018):	This policy is intended to facilitate the development of aggregates quarries in areas of less	N/A	This policy is expected to provide a range of benefits during site development and restoration.	This policy is expected to strengthen existing safeguarding provision and to provide a range

Table 10b - Sustainability appraisal of Policies MS-2, MS-8 and MS-9.

Sustainability Objectives	Policy MS-2: Sand and Gravel Area of Search (Policy Removed)	Policy MS-2 Unallocated Sand and Gravel Sites (Modified/New policy)	Policy MS-8 7: Puddletown Road Area Policy	Policy MS-9 8: Preventing Land -Use Conflict
	<p>landscape/visual/biodiversity impact, supplementing the provision of aggregates from sites formally designated in the Plan.</p> <p>It performs well against the sustainability objectives, concluding that impacts will be predominantly positive or neutral (assuming that impacts of new sites are satisfactorily mitigated at planning application stage).</p> <p>Modifications have been proposed to this policy to remove reference to the area of search.</p>		No changes are considered necessary.	<p>of benefits through maintaining an appropriate separation between minerals development and built development.</p> <p>No changes are considered necessary.</p>
<p>Updated Conclusion – including proposed modifications (December 2018_</p>	<p>Th revised MS-2 policy 'Unallocated Sand and Gravel Sites' is intended to facilitate the development of aggregates quarries. Widening the policy scope to the resource blocks rather that the area of search may provide advantages in terms of the provision of minerals.</p> <p>Generally, it performs well, as minerals development facilitated by this policy would go through the normal assessments to ensure no unacceptable impacts arise.</p> <p>No further changes are considered necessary.</p>		<p>The proposed modifications do not change the original conclusion.</p> <p>No further changes are considered necessary.</p>	<p>The modifications proposed provide clarification regarding what facilities will be safeguarded.</p> <p>This further strengthens safeguarding provisions.</p>

Table 10b - Sustainability appraisal of Policies MS-2, MS-8 and MS-9.				
Sustainability Objectives	Policy MS-2: Sand and Gravel Area of Search (Policy Removed)	<u>Policy MS-2 Unallocated Sand and Gravel Sites</u> (Modified/New policy)	Policy MS- 8 <u>7</u> : Puddletown Road Area Policy	Policy MS- 9 <u>8</u> : Preventing Land -Use Conflict
				No further changes are considered necessary.

8. Appraisal of Nominated Sites

Background

- 8.1. In order to predict the impacts/benefits of the various site allocations and to identify the response to these impacts/benefits, each site nominated to the Mineral Planning Authority has been assessed against all the sustainability objectives derived from the Sustainability Appraisal Scoping Report. This has included temporal assessment, considering the short, medium and long term impacts or in mineral planning terms, possible impacts/benefits at the site preparation, working and restoration/aftercare stages.

The Site Appraisal Process

- 8.2. The Sustainability Appraisal site appraisal process has incorporated two stages, a preliminary technical exercise in which a series of site selection criteria are applied, followed by an assessment of each site against the sustainability objectives and based on the results of the criteria assessment, with commentary on identified impacts or benefits over specified timescales and a recommendation regarding inclusion or exclusion of the site.
- 8.3. The site selection criteria and methodology used initially are set out in Appendix 1 of the 2014 Minerals Strategy. They are intended for use as part of the site selection process and form part of the Sustainability Appraisal itself. The criteria relate directly to both the SEA Directive Issues and the sustainability objectives, as shown in Tables 8 and 9 of this Sustainability Appraisal. There are 25 criteria in all, covering ecological, economic and social issues and providing a standardised approach to assessing mineral site nominations and a clear audit trail to demonstrate how assessments have been undertaken.
- 8.4. Application of the criteria includes recording a subjective assessment of likely impacts/benefits for each criterion and, depending on the anticipated strength of the impacts/benefits, the assignment of a colour according to a ranking devised specifically for each of the 25 criteria. This provides both a written explanation of the level of anticipated impact/benefit and a visual impression of the suitability of any site nomination. If there is a predominance of red/orange scores for any site assessment, this indicates that if the site is to progress it will likely need a higher level of mitigation than another site that records more greens. Figure 2 below is an example of three completed criteria.

Figure 2: Examples of completed site assessment criteria

Landscape	
Criterion C7 – Impact on designated landscapes.	B
<p>Significant adverse impact Dorset County Council 23 October 2013</p>	
Criterion C8 – What is landscape capacity to accommodate proposed development.	A
<p>It is considered that there may be an issue regarding cumulative landscape and visual impacts in relation to the existing workings in the area and in this well used and sensitive part of the AONB. The site is enclosed by woodland on all sides apart from its eastern edge. Development would not significantly affect the local landscape and visual context (outside the site), but would affect views from the Purbeck Hills; it would extend the extent of quarrying onto the south facing side of the ridge of land running along Puddletown Road, extending the potential visibility of quarries in this area to a wide area of landscape to the south, including the AONB. However, if the developer can provide modified proposals that do not cause significant harm to views from the Purbeck Hills, and evidence to demonstrate the effects on these views, the capacity of this site could potentially be increased.</p> <p>Dorset County Council 26.11.2012</p>	
Criterion C9 – Impact on historic landscapes.	C
<p>Much of the site, with the possible exception of the lower part of Baker’s Well Valley, would have been heathland before the woodland was planted. This heathland formed part of the setting of the Scheduled Monuments referred to in C11. Unsympathetic extraction and quarrying could have a significant negative impact on the setting of these Monuments, but there is the potential for an improvement in that setting through restoration to heathland.</p> <p>Dorset County Council 4/11/2013</p>	

- 8.5. Completion of the 25 criteria for each site nomination required input from a range of disciplines within Dorset County Council, including landscape, heritage, ecology, geological sciences and highways. The Environment Agency have also provided input.
- 8.6. As stated, this was essentially a technical assessment, providing information about the site nominations and the possible effects of their development. This information was important in its own right, and was also used to inform the actual sustainability appraisal itself, applying the sustainability objectives in a further assessment of each site nomination.
- 8.7. This provides a two stage assessment process, where...
 - Stage 1** is a preliminary technical exercise, assessing all the site proposals through applying the site selection criteria set out in the Minerals Strategy, followed by...
 - Stage 2** which is an assessment of each site against the sustainability objectives and based on the results of the Stage 1 assessment as described above, with commentary on identified impacts or benefits over specified timescales, consideration of secondary/cumulative/synergistic effects, hydrology, health impacts and a recommendation regarding inclusion or exclusion of the site.
- 8.8. The Stage 1 assessments have been carried out in different phases and are can be found on our

website¹⁰. The results of the Stage 2 assessments are presented separately in Appendix A (for sites being taken forward) and Appendix B (for sites not being taken forward) and Appendix C (sites withdrawn or already permitted). These assessments have now been updated to reflect proposed modifications to the sites and development guidelines.

8.9. Further information on the process of site identification and selection is provided in Appendix D of this report.

Secondary, cumulative and synergistic effects

8.10. The SEA Directive requires the assessment of effects including secondary, cumulative and synergistic effects. These are defined as follows:

- i. Secondary or indirect effects are those that are not as a direct result of the Mineral Sites Plan, but occur at a distance from the original effect or as a result of a complex pathway.
- ii. Cumulative effects are those effects which, though they may be small in relation to one policy, may combine across the plan (or in association with other plans) to produce an overall effect which is more significant.
- iii. Synergistic effects are those where the combined effect of a number of policies is greater than the sum of individual effects.

Examples of cumulative, synergistic and secondary

Cumulative	<ul style="list-style-type: none"> • dust, emissions, noise, vibration and traffic-related impacts in conjunction with other workings in the vicinity (see secondary impacts below); • loss of habitat or green infrastructure if several sites are being worked at the same time in the same location and there is no comparable habitat nearby; • lowering of groundwater particularly in the vicinity of sensitive natural receptors as a result of simultaneously working a cluster of several sites 'dry'.
Secondary	<ul style="list-style-type: none"> • use of active sites for temporary flood storage while they are active (for this reason it is considered to be secondary rather than synergistic) • contribution of road traffic generated by mineral workings to congestion and other impacts in nearby villages (clearly this impact could also be considered to be cumulative)
Synergistic	<ul style="list-style-type: none"> • scope to restore workings for biodiversity gain in line with priorities in each part of the county (recognising that this will result in a net loss of agricultural land); • co-location of aggregates reprocessing facilities with workings to promote increased use of secondary materials (recognising there is only likely to be a net benefit where the workings are fairly close to an urban area otherwise this would involve moving inert waste over some distances by road, offsetting one or all of the resource efficiency benefits.

8.11. Site Selection Criteria 21 of Appendix A of the Minerals Strategy assesses whether the proposal/site nomination under consideration has any effects on cumulative impacts. Every site nomination has been assessed against this criterion, taking into consideration both mineral and non-minerals

¹⁰ The 2013/14 site assessments can be seen at:

http://consult.dorsetforyou.com/portal/minerals_and_waste/mineral_sites_plan?tab=files

The 2015 assessments are available online at are available online at:

http://consult.dorsetforyou.com/portal/draft_minerals_plan?tab=files

development and the outcomes are reported in the site assessments (the Stage 1 assessments referred to above) for all the sites. Following discussions at the examination hearings, further work has been undertaken to ensure that the cumulative impacts of development of the site allocations has been undertaken thoroughly. This can be found as a separate document that should be read alongside this report.

- 8.12. The information from the site assessments has been taken forward into the sustainability appraisal site assessments (the Stage 2 assessments) that have been carried out. Each Stage 2 assessment report includes consideration of possible cumulative/secondary/synergistic impacts for each site nomination (see Appendices A, B and C of this Report). None of the sites identified as being suitable to be taken forward were considered to contribute to cumulative impacts that cannot be mitigated. Any issues/impacts can be satisfactorily dealt with at the planning application stage.
- 8.13. In addition, further work has been undertaken on cumulative impacts for all sites. This information is presented in a separate document to be read alongside this report. Following the hearing sessions in September/October 2018 the Mineral Planning Authority (MPA) carried out a screening exercise of the 'Cluster 4' sites (AS19 Woodsford Extension, AS25 Station Road and AS26 Hurst Farm) to consider potential cumulative impacts. This comprised the following steps:
- Reviewing what cumulative impact assessment has already been done
 - Considering subsequent evidence (including heritage assessment for individual sites) that has been prepared in support of the plan
 - Reviewing the results of the assessment
 - Recording the screening
- 8.14. The results of this screening were made available as MSDCC - 82 on the MPA website. It was presented as a matrix is based upon Annex 1 of the SEA Directive which sets out the requirement for Likely Significant Effects:
- The information to be provided under Article 5(1), subject to Article 5(2) and (3), (includes) the following:*
- (f) the likely significant effects¹ on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;*
- ¹ These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.*
- 8.15. Each matrix set out a list of receptors including those identified in the SEA Directive and each site is assessed against these in relation to:
- Whether or not there is a risk of a likely significant effect
 - If so, whether this is direct or secondary
 - The scope for cumulative impacts (allowing for other mineral sites or other proposed development in the area)
 - Whether any impacts could be synergistic (i.e. greater than the sum of their parts)
 - A summary of possible relationships between receptors.
- 8.16. The matrix also considered the potential timescale of impacts and whether or not these could be temporary or permanent. In each box of the matrix the text shown in standard black font was taken directly, or summarised from, the baseline sources.
- 8.17. Where the baseline was considered deficient or not sufficiently transparent, further text was introduced and shown in red italics. This was informed by existing commentary on impacts or considerations recorded in the baseline sources, together with the evidence that has been provided in support of the examination process and the hearing sessions. Where this flagged up potential

cumulative or synergistic impacts, this was recorded.

8.18. The matrix considered whether or not the screening had identified a need for further modifications to the plan, and this was recorded in the comments column. No further modifications over and above those which have already been tabled were considered necessary.

8.19. As noted above, the preliminary screening exercise was initially only carried out on three of the sites proposed for allocation. The MPA considered it necessary and appropriate to carry out this screening for all the sites proposed for allocation, to identify possible in-combination effects and whether additional modifications were needed for all sites proposed for allocation and to ensure that all sites are screened/assessed on an equal basis. The matrices below have therefore extended the exercise described above to all 19 of the sites proposed for allocation in the Mineral Sites Plan. The baseline is the relevant and updated versions of the information as described above.

8.20. The full range of sites screened is:

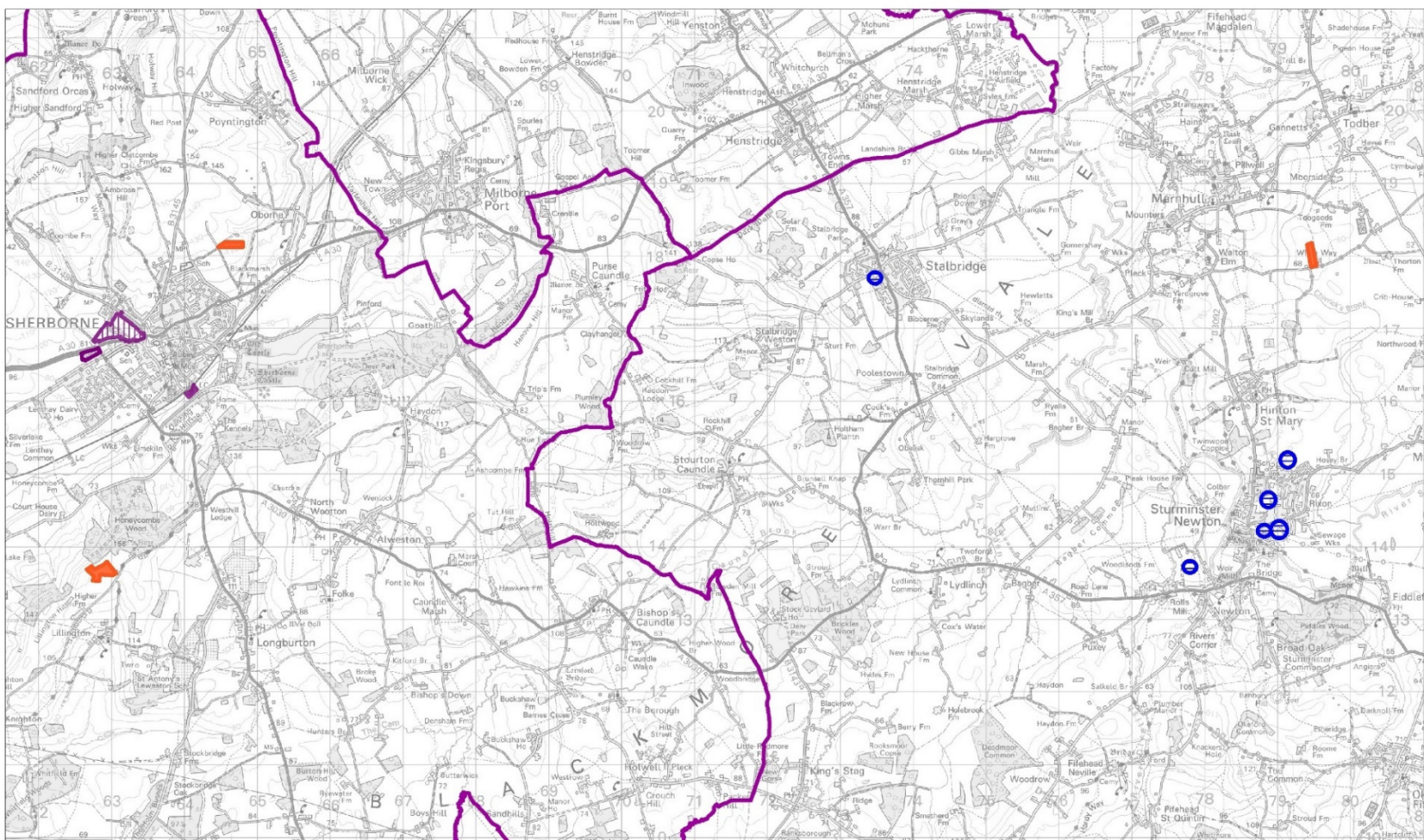
Site Reference	Name of Allocated Site	Mineral Type
AS06	Great Plantation	Aggregate - Sand/Sand and Gravel (7)
AS12	Philliol's Farm	
AS13	Roeshot	
AS15	Tatchell's Extension	
AS19	Woodsford Quarry Extension	
AS25	Station Road	
AS26	Hurst Farm	
AS27	Land at Horton Heath	
PK16	Swanworth Quarry Extension	Crushed rock (1)
BC04	Trigon Hill Extension	Ball clay (1)
RA01	White's Pit	Recycled aggregate (1)
PK02	Blacklands Quarry Extension	Purbeck Stone (5)
PK10	Southard Quarry	
PK17	Home Field	
PK18	Quarry 4 Extension	
PK19	Broadmead	
BS02	Marnhull Extension	Other Building Stone (3)
BS04	Frogden Extension	
BS05	Whithill Extension	
		19 sites screened

8.21. This screening exercise, for all the site allocations, is presented as an addendum to the existing SA report, but is a separate document (MSDCC - 85). Following the screening matrix prepared for each site, a summary of the outcomes is provided, identifying possible in-combination effects and inter-relationships among receptors for each site. This summary, for each of the 19 site allocations, in addition to being presented in this screening report has also been copied into the relevant site assessment in Appendix A of this Sustainability Appraisal report.



Clusters of sites



- 8.22. Minerals can only be worked where they are found, which limits spatial options for development of new sites and can make it more likely that mineral sites will be identified in clusters/discrete areas. This is more likely to result in cumulative impacts.
- 8.23. Cumulative/secondary impacts are not restricted to just other minerals or waste development, but also non-minerals development, such as housing and associated infrastructure. This has been considered through a review of existing development plans in Dorset, taking into consideration existing allocations and where appropriate potential future allocations currently going through the plan process. These are identified on a series of maps, set out below.
- 8.24. Given the need to work minerals where they are found, it is often necessary to apply site-specific mitigation at the planning application stage, to address impacts such as cumulative impacts. There are up to five clusters of sites that can be identified, and the following analysis considers the clustering effect, with impacts and mitigation.
- 8.25. **NB** - some of the sites shown on **Figure 4: Mineral Site Clusters** are no longer proposed for allocation in the Plan - these include **Philliol's Farm** and **Trigon Hill Extension** in Cluster 2; **Hurn Court Farm** in Cluster 3; and **Downs Quarry** and **Gallows Gore** in Cluster 6.

Figure 3 – District/Borough Allocations with Minerals and Waste Proposed Allocations



Map 1 - Cumulative Impacts for sites allocated in Mineral Sites Plan

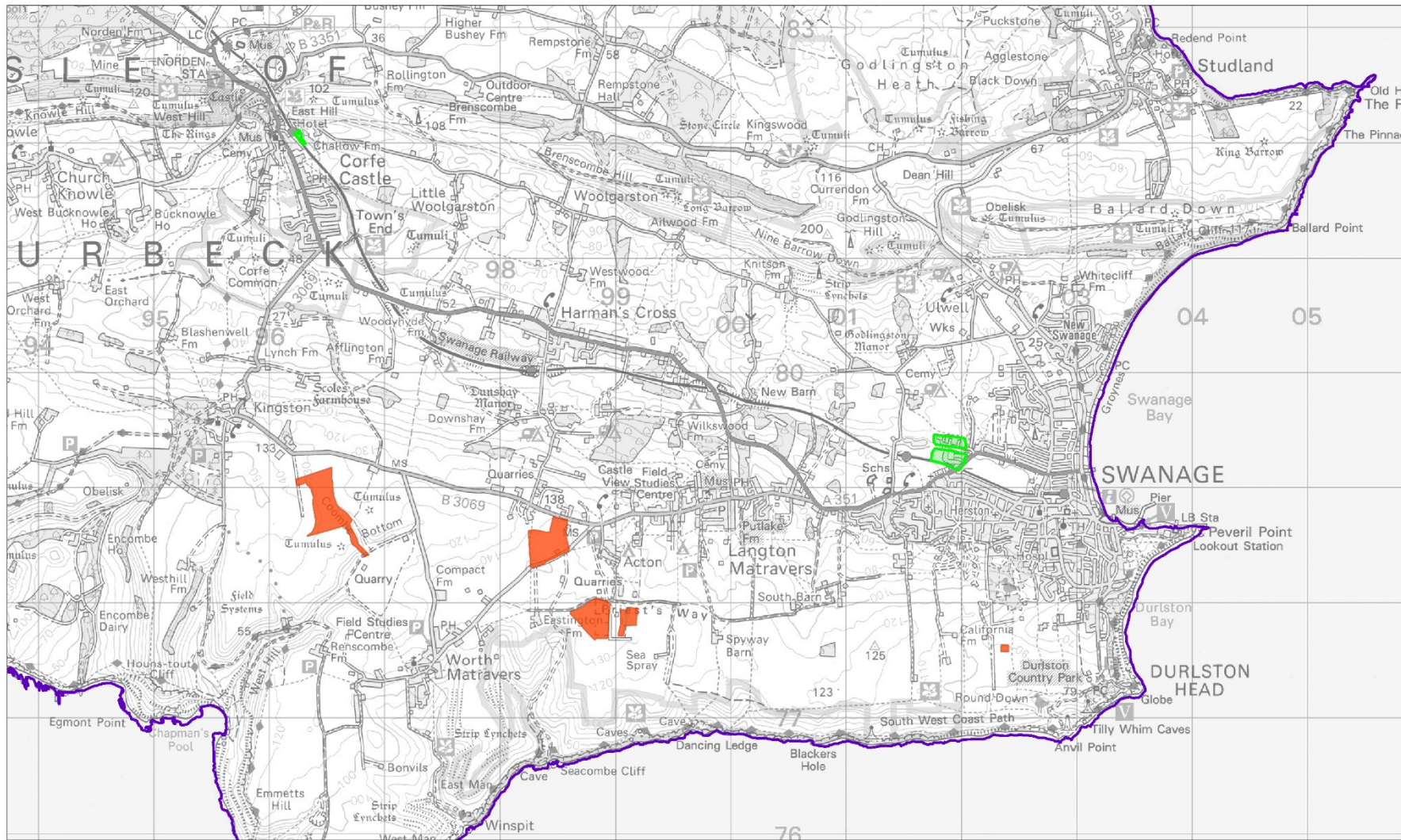
-  Employment allocations
-  Employment allocations

-  Mineral sites allocated in Bournemouth, Dorset and Poole Mineral Sites Plan
-  Administrative boundaries




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Geomapping Plc and Bluekey International Limited (2017)



Map 2 - Former Purbeck area - Cumulative Impacts for sites allocated in Mineral Sites Plan

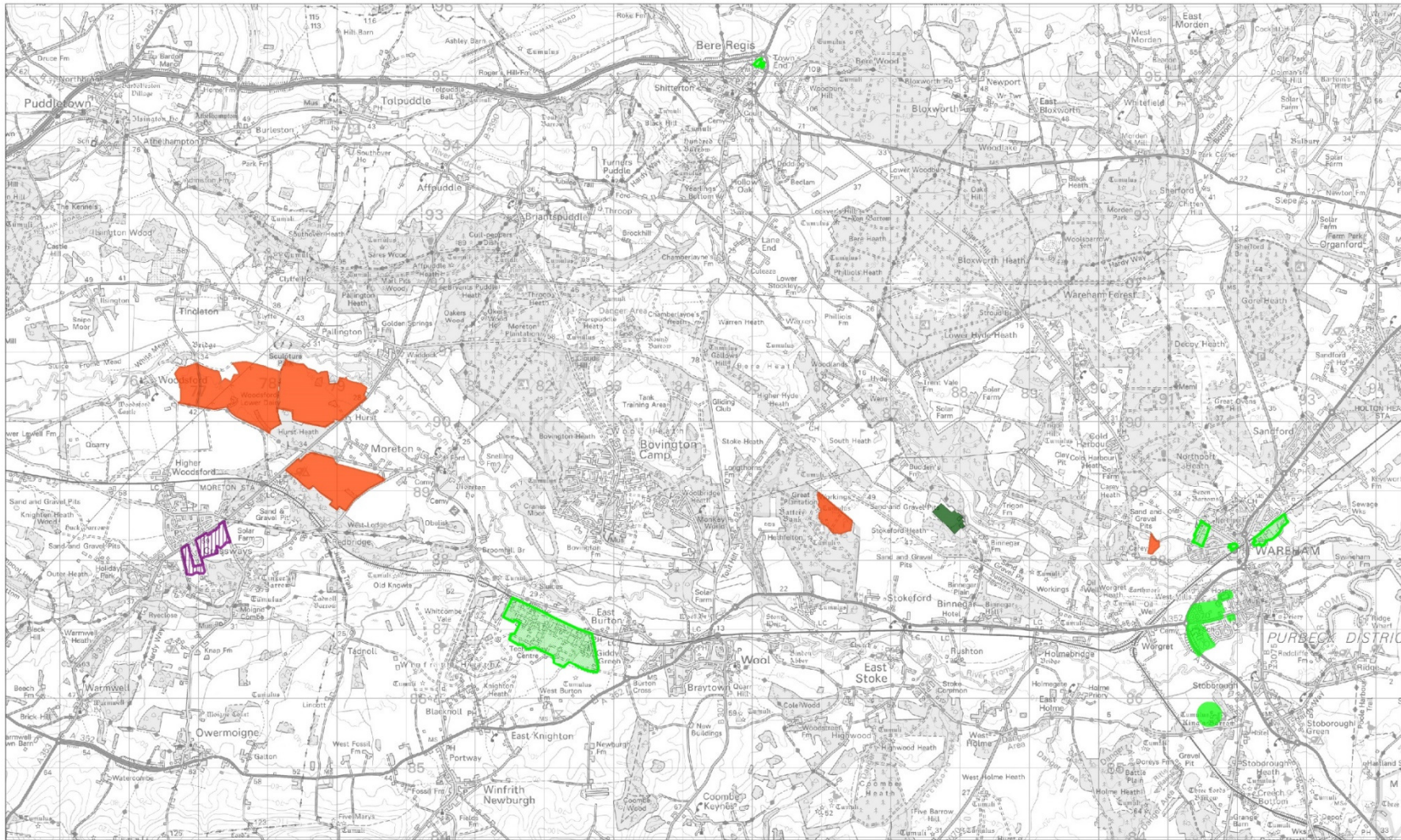
 Employment allocations - Purbeck adopted plan

 Mineral sites allocated in Bournemouth, Christchurch, Poole and Dorset Mineral Sites Plan

 Administrative boundary




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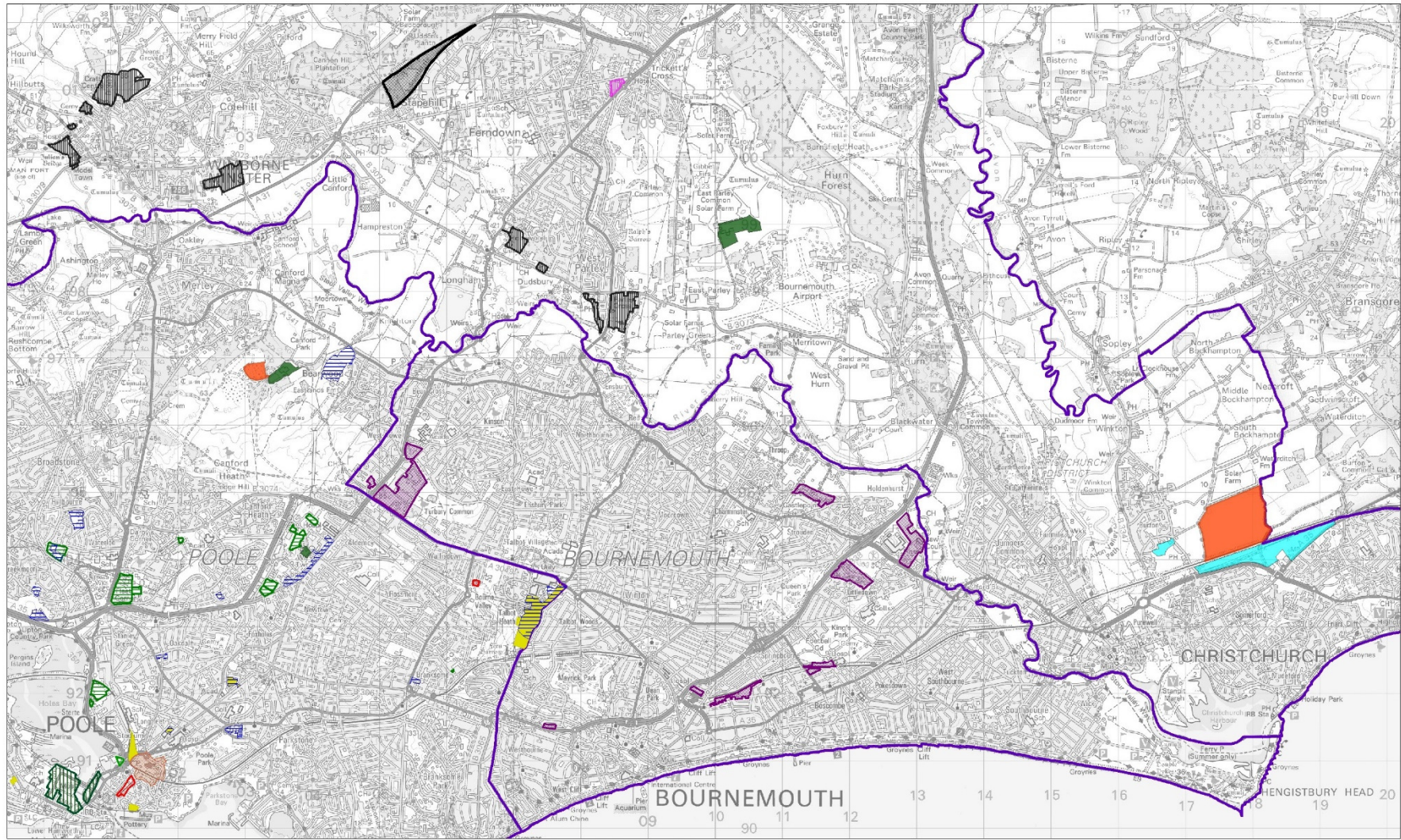
Map 3 - Former West Dorset and Purbeck areas - Cumulative Impacts for sites allocated in Mineral Sites Plan

- Settlement extensions - Purbeck adopted plan
- Employment allocations - Purbeck adopted plan
- Employment allocations - WDDC adopted plan 2015
- Mineral sites allocated in Bournemouth, Christchurch, Poole and Dorset Mineral Sites Plan
- Waste sites allocated in Bournemouth, Christchurch, Poole and Dorset Waste Plan




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Map 4 - Cumulative Impacts for sites allocated in Mineral Sites Plan

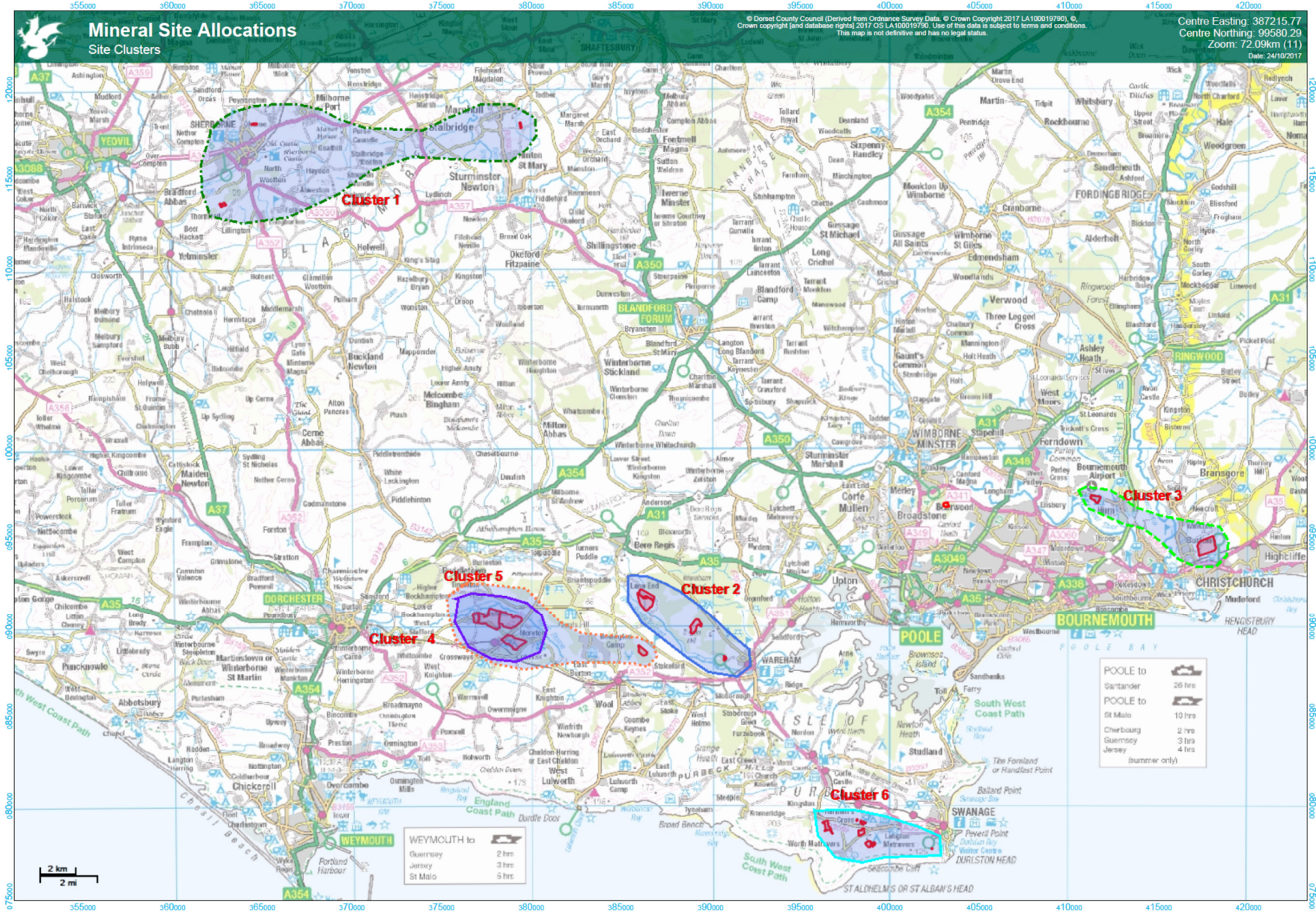
<ul style="list-style-type: none">  Residential allocations - Poole adopted plan  Employment allocations - Poole adopted plan  Employment allocations - Poole draft plan  Regeneration area - Poole draft plan  Residential allocations - Poole draft plan 	<ul style="list-style-type: none">  Employment allocations - Bournemouth adopted plan  Housing allocations - East Dorset adopted plan  Employment allocations - East Dorset adopted plan  Employment allocations - East Dorset adopted plan  Housing allocations - Christchurch adopted plan 	<ul style="list-style-type: none">  Mineral sites allocated in Bournemouth, Christchurch, Poole and Dorset Mineral Sites Plan  Waste sites allocated in Bournemouth, Christchurch, Poole and Dorset Waste Plan  Authority administrative boundaries
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Figure 4: Mineral Site Clusters



NB: Concern was raised at the examination hearings that cumulative impacts had not adequately been considered for some sites. As a result, the MPS has taken the decision to provide a more thorough assessment of cumulative impacts for all site options covering each of the site selection criteria. This will build on some of the issues discussed below and can be found as a separate document.

Cluster 1 – Other building stone sites

8.26. The three 'Other Building Stone' allocations in the north of the county, BS02, BS04 and BS05 (see Figure 3 above, shown in green das-dot line), form a loose cluster, particularly the two around Sherborne. The District Excerpts Map 1 (above) indicates employment or housing allocations around Sherborne and Sturminster Newton. However, all three of these Building Stone sites are small-scale and low impact, and all are proposed extensions of existing sites, not expected to be worked simultaneously with the existing sites. It is not expected that they will lead to cumulative or other similar impacts during their development.

Cluster 2 – C7 Wareham to A35 – Ball Clay and Aggregates

8.27. There are three site allocations served by this road – AS12 Philliol's Farm, BC04 Trigon Hill Extension and AS15 Tatchell's (Figure 3, solid blue line). The ball clay site, BC04, is an extension of an existing site. This site is proposed for deletion from the MSP, following the grant of planning permission. AS15 Tatchell's is an extension of an existing site, but it has not been operational for years, so if AS15 is developed it will seem like a new site. In addition, housing and employment allocations are identified at Wareham.

8.28. **Changes to Cluster 2 - AS12 Philliol's Farm is a new site, however it is proposed for deletion from the MSP, and BC04 Trigon Hill Extension has been permitted so is longer proposed for allocation. AS15 Tatchell's is still proposed for allocation, and the permitted Trigon Hill site is a current mineral site.**

8.29. These sites are not close to each other and not expected to be inter-visible. It is expected that the main cumulative impact will be traffic related, through the C7 carrying additional traffic. Most of the aggregate quarry traffic will move to and from the A35, and traffic heading south-eastward towards Wareham would be mostly carrying out deliveries. For BC04 Trigon Hill Extension, traffic will head towards Wareham to access the Furzeyground ball clay processing site south of Wareham.

8.30. Trigon Hill Extension is an extension of an existing operation, and it is expected that it will not be worked simultaneously with existing site – although the existing ball clay site will likely be in the process of restoration while the extension is worked. No sand and gravel is proposed to be extracted and removed with the ball clay. It is therefore expected that the traffic movements identified for Trigon Hill Extension will represent a reduction in traffic movements, from what has at times been generated from the Trigon Hill site.

8.31. Tatchell's is essentially a new sites, as there has been no extraction for some time. Tatchell's is relatively small, and will be worked quickly. The site will be subject to a detailed transport assessment at the planning application stage, identifying impacts and appropriate mitigation. Options such as restricting quarry traffic in rush hour are possible.

Table 11 – Traffic Movements along the C7

Site	HGV movements	North (two-way)	South (two-way)
Tatchell's	40	30 (75%)	10 (25%)
Philliol's Farm	80	65 (c.80%)	15 (c.20%)
Trigon	c. 40 – Ball Clay only	5 (c.12%)	35 (c.88%)

Hill Extension			
	Total	100 35	75 45

- 8.32. There are several camping and caravan sites along the C7 all of which have suitable entrances. Towards the south of the C7 there are a significant number of dwelling houses but these are within the 30 mph zone and, as described above, there are no existing accident problems.
- 8.33. The junction between the C7 and A35 at the northern end of Sugar Hill has no existing accident or capacity problem. The proposed minerals extraction sites along Sugar Hill could potentially add 100 movements (50 in each direction) through this junction over the course of a typical day. This is in the order of up to 12 movements per hour. Whether the junction can handle this loading will be tested at planning application stage.
- 8.34. A modification is proposed to remove Philliols Farm from the Plan. This will reduce the potential for cumulative traffic impacts on the C7.
- 8.35. A further modification is also proposed to the Mineral Sites Plan Development Guidelines for the Tatchell's site allocation to highlight the potential for cumulative impacts in this area.
- 8.36. A proportion of traffic travelling south on the C7 will continue to travel north on the A351 towards the Bakers Arms roundabout. Trips from Trigon to Furzebrook would turn south down the A351 but the processed product would in turn be transport further afield on the northern section of the A351.
- 8.37. This route already carries high levels of traffic, with peak hour congestion. However, there should be no increase in ball clay traffic. Development at Tatchell must demonstrate that the local road network has the necessary capacity for the resultant traffic.
- 8.38. It is therefore expected that the allocation of these sites could lead to cumulative impacts, depending on the timing of when the sites are worked. However, it is expected that appropriate mitigation could be put place to offset the impacts, and the potential impacts are not significant enough to prevent the allocation of these sites.
- 8.39. A modification is proposed to Policy MS-1 to ensure that proposals for allocated sites demonstrate that any adverse impacts, including cumulative impacts, are mitigated.

Cluster 3 – Hurn Court Farm and Roeshot – Aggregates

- 8.40. These two sites, AS09 and AS13 respectively, are located north and east of Christchurch, enclosed by a green broken line on Figure 3 above. Both sites would primarily serve the Bournemouth/Poole/Christchurch urban area. **AS09 Hurn Court Farm has now been permitted and no longer forms part of this Plan. ~~would be an extension of an existing site.~~** AS13 Roeshot is the western part of a larger site, the eastern part of which is in Hampshire and is currently the subject of a planning application, expected to be determined this year. If permitted, the Dorset part of Roeshot would be extension of the Hampshire part.
- 8.41. The key cumulative issue for both sites is traffic, as traffic levels are already high in both areas. Housing allocations are proposed in Christchurch and in West Parley. The Christchurch Urban Extension south of Roeshot is particularly relevant.
- 8.42. The A35 is one of the busiest roads in Dorset. The expectation is that the site could generate 100 two-way HGV movements per day meaning that an additional 80 HGVs could be expected on the A35 corridor. This constitutes an 11% increase in HGV traffic.
- 8.43. This route already operates at capacity in peak periods. It would therefore be necessary to ensure that vehicles do not enter and exit the site at peak hours as far as possible. Given that that this

mineral extraction will generate a substantial increase in HGV movements on the westbound A35 through Christchurch, Dorset County Council will seek contributions from quarry operators for the implementation of measures to mitigate the effects of HGVs on the Dorset network.

- 8.44. However, as both sites are extensions of existing proposals, it is expected that issues such as traffic impacts mitigation will already have been addressed and therefore unlikely to completely prevent these allocations being developed themselves. Further mitigation may be identified. **A modification is proposed to remove AS09 from the Plan. This site has now been permitted.**
- 8.45. Other issues such as restoration of already worked areas and mitigation of amenity would be dealt with at the planning application stage.

Cluster 4 – Station Road, Hurst Farm and Woodsford – Aggregates

- 8.46. Cumulative impacts for these sites – indicated on Figure 3 with a solid purple outline – include traffic, with impacts primarily on the B3390 and amenity. Cumulative impacts, particularly for traffic, are exacerbated with proposals for built development around Crossways and at Moreton Station.
- 8.47. There are two potentially sensitive sites on the highway network that need to be considered. These are the Hurst Bridges and the junction between the C80 and B3390 at Waddock Cross. Hurst Bridges are two narrow bridges on the B3390 just to the north of the Hurst Farm site. There has previously been an accident problem at this location and some concern has been raised over the impact of proposed minerals sites. The bridges are within a de-restricted (60mph) speed limit and there are vertical and horizontal alignment issues on the approaches. The Waddock Cross junction is at the top of a small rise and there was some concern with visibility problems due to the vertical alignment of the carriageway.
- 8.48. A Transport Assessment with modelling has been carried out for the local network, taking into account both existing and proposed built and minerals development - proposed by Dorset County Council as Mineral Planning Authority and Purbeck District Council and West Dorset District Council as Local Planning Authorities. The study concluded that there was capacity for all the proposed development, both for minerals and for housing. This report can be seen at: <https://www.dorsetforyou.gov.uk/planning-buildings-land/planning-policy/dorset-county-council/minerals-planning-policy/mineral-sites-plan/mineral-sites-plan.aspx> (MSDCC-36)
- 8.49. In terms of amenity, this primarily includes visual impacts from the amount of land being quarried at any one time and noise from more than one site being worked simultaneously. It is more relevant to AS26 Hurst Farm and AS19 Woodsford Extension – AS25 Station Road is spatially removed and largely screened by trees. Apart from the cumulative traffic impacts already mentioned, it will contribute relatively little cumulative impact.
- 8.50. The signage and lining at Hurst Bridges has been improved in the last five years. Advice from Traffic Management suggests that there is ample advanced warning to motorists of the narrow bridges and that there is no further suitable action that can be taken at this location.
- 8.51. Visibility at the Waddock Cross junction has been accurately measured from the point of view of an HGV driver, whose eye level is considerably higher than a driver in a car or van. The results showed that there was ample visibility for vehicles turning into or out of the C80. Accidents at this location were mainly as a result of cars ignoring or not noticing the give way with only one citing visibility as an issue. The proposed increase in traffic here is therefore not thought to present a problem in highway safety or capacity.
- 8.52. It is accepted that Hurst Farm and Woodsford Extension have the potential to give rise to cumulative impacts on amenity, depending on the timing of their working. This is exacerbated by the fact that the two sites are in different ownerships. Modifications are proposed to the Development Guidelines to ensure issues are addressed at the planning application stage. It is expected that this and protection offered through local and national planning policy will satisfactorily address the impacts.
- 8.53. There are secondary benefits to be realised from the development of both Woodsford Extension and

Hurst Farm. Post mineral working, the creation of multi-functional green infrastructure links across and along the valley, linking to adjacent centres of population, will be important. This could include grazing pasture and/or a large scale wetland restoration scheme with significant recreational opportunities, which would contribute to flood alleviation, contribute towards overall reduction in phosphate, nitrogen and sediment load in the lower reaches of the River Frome and Poole Harbour and create habitat for the conservation of protected species such as otter and water vole as well as many species of wetland bird.

- 8.54. There are synergistic effects between two of these proposed sites, Hurst Farm and Station Road. Both sites are in the same ownership, and it is proposed that a single processing plant will be located at Hurst Farm and used to process the mineral from both sites. The two sites will essentially be worked as one, which will minimise impacts e.g. there will be no need for two processing plants, and only one site will be worked at any one time. If for any reason one or both of the sites are reduced in size, there is still potential for both to be worked as they will essentially comprise one site, providing enough mineral to justify their development.
- 8.55. The potential for cumulative impacts from these sites has been highlighted in the development guidelines for AS19, AS25 and AS26. A series of mitigation measures have been set out for each site to ensure impacts are reduced to acceptable levels. This includes restrictions on simulations working for adjoining quarries and details of phasing of operations. A restriction on processing within AS25.

Cluster 5 – Cluster 4 Plus AS06 Great Plantation on the C80 Puddletown Road

- 8.56. Cluster 5 is a combination of Cluster 4, as described above, along with the AS06 Great Plantation site on Puddletown Road (C80). It is shown in [Figure 4](#), outlined in an orange dotted line. The Great Plantation site, if developed, would be a follow-on site/extension after Hyde Pit, a current aggregates quarry. There would be no intensification of traffic.
- 8.57. These sites are all considered together since it is expected that some of the traffic generated by Cluster 4 will head north along the B3390 to Waddock Crossroads, then eastwards along the C80 then northwards towards Bere Regis on the C6. The C6 would also carry traffic from Great Plantation and from other sites on the Puddletown Road and additional traffic from Wareham allocations through part of Bere Regis, to access the A35/A31. Bere Regis could therefore experience cumulative impacts from increased traffic.
- 8.58. There is an existing first school on the east side of the C6 Rye Hill in Bere Regis. It should be noted that there is a possibility that the existing first school will be moved to a new site and enlarged to form a primary school (Purbeck Local Plan – Part 1 November 2012). This would potentially remove the school from the route taken by HGV's to the A31/A35.
- 8.59. The school is within the 30mph zone. There are advanced warning signs, including flashing lights, and 'slow' markings on the road as well as a zebra crossing serving the school.
- 8.60. While an increase of Heavy Goods Vehicles may impact upon amenity, there is no reason to suggest that it could not be safely accommodated on the existing highway network or that it would impact on the capacity of the network. The Highways Agency is responsible for these roads and will be consulted on the potential impact.
- 8.61. The potential for cumulative impacts from the Cluster 4 sites has been highlighted in the development guidelines for AS19, AS25 and AS26. A series of mitigation measures have been set out for each site to ensure impacts are reduced to acceptable levels. This includes restrictions on simulations working for adjoining quarries and details of phasing of operations. A restriction of processing within AS25.
- 8.62. The potential for cumulative impacts for AS06, given other mineral workings in the area, is already acknowledged in the Plan. A development guideline requires the assessment and addressing of impacts.

Cluster 6 – Purbeck Stone sites

- 8.63. Seven Purbeck Stone site allocations were included in the Pre-Submission Mineral Sites Plan, all on the Purbeck Plateau and most around Worth Matravers/Acton. One lies to the south of Swanage. All, with the exception of PK-16 Swanworth Quarry Extension, are relatively small and produce Purbeck Stone for building/roofing/walling uses. All, ~~with the exception of Gallows Gore~~, are extension sites, following on sites from existing quarries.
- 8.64. **Changes to Cluster 6 - PK15 Down's Quarry and PK21 Gallows Gore have been withdrawn, and are no longer proposed for allocation.**
- 8.65. Cumulative traffic impacts are expected to be minimal, since all sites follow on from existing operations. The exception is Gallows Gore, and this is not expected to be a problem either, as the stone would be extracted in time-limited campaigns and taken to a nearby service area to be processed and sold. Output from the service area would remain relatively constant.
- 8.66. Cumulative visual impacts, both locally and with wider impacts on the AONB, are also relevant. These will be identified in the Development Guidelines for the relevant sites and the visual impacts will need to be addressed at the planning application stage if not before. The site allocations, with the exception of part of Swanworth Quarry (which is not being treated as a Purbeck Stone dimension stone quarry) are all within the Purbeck Stone Area of Search identified in Policy PK-2 of the 2014 Minerals Strategy.
- 8.67. A modification is proposed to remove Gallows Gore from the Plan. This should reduce cumulative effects, particularly as this was the only new site. All the allocations are extensions to existing sites. Development guidelines have been included within the Plan, as appropriate, to acknowledge the potential for cumulative impacts and opportunities for minimising impacts will need to be considered.

Recycled aggregate

- 8.68. The recycled aggregate site, RA01 at Canford in Poole, is already implemented through an existing, temporary permission. It did not involve any new development or a new site, and no intensification is proposed. It does not sit readily in any clusters.

9. Health Impact Assessment

Introduction

- 9.1. Health Impact Assessment (HIA) helps to shape emerging plans by predicting the health consequences of a proposal or policy being implemented. Mineral extraction, processing and transportation can have implications on the public health and wellbeing and HIA seeks to anticipate health impacts, for which mitigation can be identified and implemented. As with Sustainability Appraisal, HIA also helps to identify potential benefits that may arise e.g. benefits of specific site restoration.

Appraisal

- 9.2. HIA has been integrated into the SA/SEA process in two ways. The two stage assessment process that has been followed to assess each site is described above in paragraphs 8.2 to 8.8. Both Stage 1 and Stage 2 have specific criteria or objectives which consider human health.
- 9.3. For Stage 1, the most relevant site assessment criteria are: *Site Selection Criterion C18: Does the proposal have any impact on Sensitive Human Receptors?* and *Site Selection Criterion C19: Does the proposal have any impact on existing settlements?* There are other criteria also relevant, including countryside recreation and access, air quality, water/flooding. Each site nomination has been assessed against all criteria, so health impacts and issues have been identified at an early stage.
- 9.4. For Stage 2 application, the 2015 Sustainability Appraisal Scoping report contained eighteen sustainability objectives, two of which are directly relevant to the assessment of health impacts; SA Objective 17 'To sustain the health and quality of life of the population' and SA Objective 8 'To protect and improve air quality'. Other objectives are also relevant to the assessment of health impacts including; SA objective 13 'To encourage sustainable economic growth' and SA objective 18 'To enable safe access to countryside and open spaces'. Draft Sustainability Appraisal reports were prepared for the 2015, 2016, 2017/18 and focused 2018/19 consultations, so again health impacts have been identified and addressed at an early stage. Furthermore appraisal of the proposed modifications has identified any further impacts and benefits from the revised text.

Consultation

- 9.5. Public consultation on the Mineral Sites Plan has raised various issues concerning health, including noise, dust and traffic, for a number of the proposed site allocations. In plan preparation, such impacts are addressed through the development of vision/objectives that take into consideration the need to address health impacts. The vision/objectives of the 2014 Minerals Strategy, which are also the vision/objectives of the Mineral Sites Plan, do make reference to protecting local communities. These are fixed, and will not be revised through the preparation of the Mineral Sites Plan.
- 9.6. The various elements of the vision and objectives are delivered through the choice of policies, and wording of the policies, for the plan. The 2014 Minerals Strategy includes a number of development management policies which will protect local communities, including Policy DM1 - Key Criteria for Sustainable Minerals Development, Policy DM2 - Managing Impacts on Amenity (the key policy), Policy DM3 - Managing the Impact on Surface Water and Ground Water Resources and Policy DM8 - Transport and Minerals Development. Other policies, such as RS1 requiring timely restoration of sites, are also relevant. At planning application, these policies will be applied to ensure the health of communities and individuals is protected.
- 9.7. Although the Mineral Sites Plan does not contain further policies to specifically address the health of communities, all the development management and other policies of the 2014 Minerals Strategy will apply to the proposed site allocations, and in this way will address any potential health impacts.
- 9.8. The individual site appraisals (Appendices A, B and C) each include separate consideration of health issues, identifying the relevant impacts and stating how these will be addressed. Health issues are not specifically mentioned in the Development Guidelines of each proposed site allocation – it is

taken that all relevant proposals, if received as planning applications, will include Environmental Impact Assessment which will include health issues, with appropriate mitigation as required by 2014 Minerals Strategy and National Planning Policy Framework policy. Many of the Development Guidelines and additional ones proposed as modifications, are related to health, as they are designed to reduce the impacts of development on amenity.

10. Equalities Impact Assessment

Introduction

- 10.1. When adopted, the Mineral Sites Plan will support and complement the 2014 Minerals Strategy by identifying the areas/sites required to provide for ongoing mineral provision. It will provide for improved restoration and long-term management in the Puddletown Road area, and also for improved safeguarding of existing mineral sites.
- 10.2. When adopted, it will supersede the last remaining extant policies of the 1999 Minerals and Waste Plan, thereby replacing that Plan.

Who will it impact upon?

- 10.3. Virtually everyone in Bournemouth, Dorset and Poole uses minerals in some way, but it is not always obvious how they are being used. Minerals are relevant to most residents/businesses, but the actual impacts of mineral working can be more focused. National policy, and development management policies of the 2014 Minerals Strategy, are intended to ensure residents and businesses are protected from the potentially harmful effects of mineral working.
- 10.4. Minerals can only be worked where they are found. This does mean that residents/communities living in areas where minerals are found are likely to experience impacts that residents in non-mineral areas do not. This is unavoidable, and the Mineral Planning Authority will use conditions attached to a planning permission to mitigate these impacts.
- 10.5. Sites proposed for allocation for new mineral development have been selected from across the Plan area, on the basis that they are in an area where mineral is found and they are considered suitable for mineral working. To be suitable, the Mineral Planning Authority will have to be satisfied that impacts of mineral working on nearby residents/communities can be satisfactorily mitigated. This is done at the planning application stage, applying national policies and local policy, primarily from the 2014 Minerals Strategy.
- 10.6. During implementation of the Plan, and development of the allocations, the Mineral Planning Authority as noted will usually require detailed assessment of possible impacts, and apply conditions necessary to mitigate these impacts to an acceptable level.

Potential Impacts

- 10.7. Tables 13 and 14 below consider possible impacts on identified characteristics, that the Mineral Sites Plan could affect.

Table 12: Does or could the service, strategy, policy, project or change have an impact upon the following:

Protected characteristic	Positive impact	Negative	No Impact	Unclear
Age				
Disability				
Gender Reassignment				
Pregnancy and Maternity				
Race and Ethnicity				

Protected characteristic	Positive impact	Negative	No Impact	Unclear
Religion and Belief				
Sex				
Sexual Orientation				
Other socially excluded groups (carers, rural isolation, low income, military status)				

Table 13: Does this have any impact on the workforce in relation to the following:

Protected characteristic	Positive impact	Negative	No Impact	Unclear
Age				
Disability				
Gender Reassignment				
Pregnancy and Maternity				
Race and Ethnicity				
Religion and Belief				
Sex				
Sexual Orientation				
Other socially excluded groups (carers, rural isolation, low income, military status)				

Comment

- 10.8. The Mineral Sites Plan proposed the allocation of 21 sites for future mineral working. It also includes an 'Unallocated Sites' policy and proposes the Puddletown Road Policy Area and improved safeguarding of existing mineral sites. The proposals and policies in the Plan apply to the community as a whole, but since minerals can only be worked where they are found, residences/communities in mineral bearing parts of Bournemouth, Dorset and Poole are more likely than the rest of the area to experience the impacts of mineral working.
- 10.9. However, within and around mineral bearing areas there is no evidence to suggest that the Plan, either in preparation or implementation, is likely to impact on specific equality groups any

differently from the impact on the general population.

- 10.10. All potential sites nominated for inclusion in the Plan have been thoroughly assessed to identify the ones expected to cause the least impacts on communities and the wider environment. No new mineral development takes place directly as a result of the Plan; before new mineral development takes place an operator must submit a planning application to the Mineral Planning Authority for assessment and determination. In most cases an Environmental Impact Assessment will be carried out in the process of determining planning applications for mineral development. At plan implementation, identified impacts are mitigated to acceptable levels by thorough assessment and application of controls such as planning conditions.
- 10.11. The plan preparation process, including consultation, is intended to be as inclusive as possible. Various draft versions of the plan will have been through up to five separate public consultations. The Mineral Planning Authority have a statutory duty to consult widely, and the Mineral Planning Authority has made the preparation process as inclusive as possible, as described in the Consultation Statement (see our website for more detail) and also below.

Consultation

- 10.12. The preparation of the Mineral Sites Plan has included a number of stages of consultation. During each consultation the Mineral Planning Authority has gathered the views of the local community and other relevant stakeholders. A key outcome therefore is a plan which reflects the views of the local community and aims to minimise adverse impacts on them.
- 10.13. Specific consultation bodies, general consultation bodies and other consultation bodies are detailed in the Town and Country Planning (Local Planning (England) Regulations 2012) and in Dorset County Council's adopted Statement of Community Involvement (2013). The general consultation bodies specifically include:
- Bodies which represent the interests of different racial, ethnic or national groups
 - Bodies which represent the interests of different religious groups
 - Bodies which represent the interests of disabled persons
- 10.14. A wide range of groups and individuals across the gender, age, belief/faith, Disability and race strands have been consulted throughout the preparation of the Mineral Sites Plan.
- 10.15. A variety of methods of consultation have been used during each consultation period and documents have been made as widely available as possible, within budget restrictions. Where possible, the contribution of different geographical groups has been monitored. Copies of the consultation documents have been made available in District/Borough Council Offices, as well as the Mineral Planning Authorities and in libraries. These buildings are intended to be fully accessible, if anyone has difficulties access the documents elsewhere.
- 10.16. The following statement has been included on the reverse cover of the consultation Mineral Sites Plan *'All documents can be made available in audio tape, large print and Braille or alternative languages on request.'* Officers try to be as helpful as possible in dealing with requests for assistance, including copying sections of the planning documents for people who cannot access them otherwise.
- 10.17. Responses to the consultation have been considered fully with additional information sought where appropriate to address issues raised through representations.

Access to Plan Sites

- 10.18. The general public does not normally have a need to access mineral workings, so there is not normally a need to ensure that allocated sites are publicly accessible. The exception is where some quarries sell mineral directly to the public – this is a commercial undertaking and not a statutory requirement, and the Mineral Planning Authority is not required to ensure such access.
- 10.19. In the case of commercial supply of mineral, equality groups could have improved employment

opportunities through access to quarries. However, such opportunities are again limited to locations where mineral is found, and quarries have been permitted.

Conclusion

- 10.20. The Mineral Sites Plan is a strategic level document that is concerned with minerals planning policies and the identification of sites based on a rigorous site selection exercise and planning merit; as such it is unlikely to impact people within the equality groups any differently than from the impact on the general population of Bournemouth, Dorset and Poole – apart from the fact a noted that mineral bearing areas will experience the effects of mineral working to a greater extent than other non-mineral bearing areas.
- 10.21. To date none of the responses received during consultations have highlighted evidence which indicates that there is an apparent impact on any of the protected characteristics identified in Tables 13 and 14.

11. Mitigation

11.1. All of the assessed sites are proposed for sand and gravel extraction in rural areas and are likely to have common ancillary effects. Some impacts may not arise due to local circumstances but, where present, they are likely to be as summarised below.

Mitigation Proposals

11.2. Minerals extraction gives rise to similar generic impacts. The resulting generic mitigation proposals are listed below. Note that these are **examples** of what will be required, and implemented, for the sites to be developed – this does not mean that every one of these mitigation measures will be implemented in each case. Every site is assessed, including at planning application stage, on its merits.

- Buffer zones along edges of the site bordering or close to sensitive human or natural receptors – aim is to directly reduce impacts (e.g. increased distance to dissipate noise) or the risk of them occurring (e.g. increased distance reducing risk material could be blown into nearby field drains);
- Bunding along edges of the site bordering or close to sensitive human or natural receptors to again increase separation while also providing a physical barrier to deflect noise and screening to reduce visual impacts;
- Vegetation screening along edges of the site bordering sensitive human receptors to reduce visual impacts with reduced loss of the workable area of the site; screens can also reduce impacts of dust blown off-site;
- Dust suppression measures including watering of internal haul roads during periods of dry weather and wheel-washing facilities for on-site plant and lorries taking material off-site;
- Discharge controls on the quantity and quality of water pumped from a site that is being dewatered to limit impacts of the adjacent water environment, particularly if this is sensitive;
- Routeing agreements to prevent or limit lorry movements through nearby villages or those along the route to the strategic road network to limit a range of amenity impacts on all properties whether or not they are designated;
- Controls on working hours to limit noise and other impacts – these are likely to apply only where working is extremely close to human receptors;
- Noise limits and emissions controls on compressors and similar machinery on the site;
- Limits on simultaneous working of sites within a cluster to reduce the risks of a range of cumulative effects on air and water quality, traffic levels and other impacts affecting local amenity. In practice operators will tend to work sites in sequence to maintain the required landbank over a long period but this does not preclude some simultaneous working.

11.3. A detailed list of Development Guidelines is included for each of the allocated sites. This includes detailed, site specific mitigation to be considered and included within any planning application. Many of the Development Guidelines have been modified through discussions at the Mineral Sites Plan Examination hearings. These modifications are generally increasing or clarifying the issues for consideration to ensure an appropriate level of mitigation is provided for the development.

12. Monitoring

- 12.1. The SEA Directive (European Directive 2001/42/EC “The assessment of the effects of certain plans and programmes on the Environment”) requires that the significant environmental effects of implementing a plan of programme should be monitored in order to identify at an early stage any unforeseen adverse effects, and to be able to undertake appropriate remedial action. SA monitoring will cover significant sustainability effects as well as the environmental effects.
- 12.2. Monitoring already plays an important role in the performance management of the minerals planning process in Bournemouth, Dorset and Poole. Between April 2004 and March 2012 monitoring was presented in the form of Annual Monitoring Reports (AMRs). These reports were required under the Planning and Compulsory Purchase Act 2004. AMRs assessed progress on the preparation of development plan documents and numbers of applications considered by the Minerals and Waste Planning Authority. They also contained data on waste arisings and management. The county council produced seven Annual Monitoring Reports since 2004 and these can be found on our website.
- 12.3. The 2014 Bournemouth, Dorset and Poole Minerals Strategy included a monitoring framework, with indicators. This includes monitoring of the policies for minerals provision and environmental and amenity protection, key aims of the Mineral Sites Plan. The 2014 Minerals Strategy policy monitoring, as it becomes established, is recorded in the AMRs for 2015, 2016 and 2017, and will be directly relevant to the implementation and monitoring of the Mineral Sites Plan.
- 12.4. In addition to this, the Mineral Sites Plan has its own monitoring framework, and the key indicators to be monitored and relevant conclusions will be included in the Annual Monitoring Reports. The monitoring framework is set out in the Mineral Sites Plan and contains more detail on the monitoring indicators and how they will be measured.

13. Sites – Assessed, Permitted and Withdrawn

Table 14: Stage 2 Appraisals for Sites Proposed for Allocation – see Appendix A

Aggregates

AS06 – Great Plantation

AS12 – Philliol’s Farm – A modification is proposed to remove this site from the Plan.

AS13 – Roeshot

AS15 – Tatchell’s

AS19 – Woodsford Extension

AS25 – Station Road

AS26 – Hurst Farm

AS27 – Land at Horton Heath - A modification is proposed to add this site from the Plan.

Crushed Rock

PK-16 – Swanworth Quarry Extension

Recycled Aggregates

RA01 – White’s Pit

Ball Clay

BC04 – Trigon Hill Extension (Trigon West) – A modification is proposed to remove this site from the Plan following grant of planning permission.

Purbeck Stone

PK02 – Blacklands Quarry Extension

PK10 – Southard Quarry

PK17 – Home Field

PK18 – Extension to Quarry 4

PK19 – Broadmead Field

Other Building Stone

BS02 – Marnhull (Whiteways Lane) Quarry Extension

BS04 – Frogden Quarry Extension

BS05 – Whithill Quarry Extension

Table 15: Stage 2 Appraisals for Sites Not Proposed for Allocation but not Withdrawn or Permitted – see Appendix B

Aggregates

AS08 – Horton Heath (including AS27 Clump Hill)

Purbeck Stone

PK08 – Quarr Farm

Table 16: Sites Withdrawn (or not being promoted) or Permitted – see Appendix C

Aggregates

AS01 – Binnegar (permitted)

AS02 – Cannon Hill (withdrawn/no longer promoted)

AS03 – Crossways (withdrawn/no longer promoted)

AS05 - East Parley Residual Reserve (withdrawn/no longer promoted)

AS09 – Hurn Court Farm (Permitted)

AS10 – Moreton Plantation (withdrawn/no longer promoted)

AS11 – Parley Court (withdrawn/no longer promoted)

AS14 – Sturminster Marshall (including George Land) (withdrawn/no longer promoted)

AS17 – Uddens (withdrawn/no longer promoted)

AS18 – Wimborne (withdrawn/no longer promoted)

AS20 – Came Home Farm (withdrawn/no longer promoted)

AS22 – Trigon Hill Extension (aggregates) – (withdrawn/no longer promoted)

AS23 – Gore Heath (withdrawn/no longer promoted)

AS24 – Purple Haze (South) (withdrawn/no longer promoted)

AS28 A&B – Gallows’ Hill A&B

PK15 – Downs Quarry Extension (Permitted therefore no need to allocate site)

PK21 – Gallows Gore (withdrawn)

Ball Clay

BC01 – Carrot Bank (withdrawn/no longer promoted)

BC05 – Dorey’s – Holme Heath (permitted)

BC06 – Woolsbarrow (withdrawn/no longer promoted)

Other Building Stone

BS01 – Manor Farm, Melbury Abbas (withdrawn/no longer promoted)

BS03 – Sloe’s Hill, Symondsburry (withdrawn/no longer promoted)

Portland Stone

PS01 – Bowers Mine Extension

PS02 – Perryfield Quarry Extension (withdrawn/no longer promoted)

Purbeck Stone

PK03 – California Quarry (withdrawn/no longer promoted)

PK11 – St Aldhelm’s Quarry Extension (permitted)

PK12 – Kingston Hill (withdrawn/no longer promoted)

PK20 – Crack Lane (withdrawn/no longer promoted)

14. Appendix A – Proposed Site Allocations

Assessing the Sites

The following appendices (A, B and C) present the Sustainability Appraisal assessments for the various sites that have been considered through the preparation of the Mineral Sites Plan. These assessments have been most recently updated to include proposed modifications that arose during the examination of the Mineral Sites Plan.

Appendix A comprises the sites that are proposed as allocations in the Mineral Sites Plan.

Appendix B comprises the sites that are not proposed as allocations, but neither have they been withdrawn or permitted.

Appendix C comprises the sites that have been considered but were withdrawn from consideration, or permitted, and in both cases are no longer under consideration.

Each site assessment uses the following scoring (below) from strong negative to strong positive, with categories for 'no effect' or 'uncertain'.

Impact Assessment Scoring

-	-	+	++	0	?
Strong Negative Impact	Minor Negative Impact	Minor Positive Impact	Strong Positive Impact	Negligible or No Effect	Uncertain

An attempt has been made to take into consideration timescales as well, setting out expected/potential impacts while the site is being prepared and worked (column headed 'Effects – P/W') and also the expected effects/benefits after working (column headed 'Effects – R/A) for Restoration and Afteruse.

Each colour and letter 'score' is meant to represent impacts **without** mitigation. A red or orange score does not mean that mitigation is impossible, it is usually possible.

Aggregates: AS06 Great Plantation Assessment Updated November 2018

Site Name/Location: AS06 Great Plantation		Nominee/Agent: SLR Consulting for Hanson UK	
Mineral Type: Sand/Gravel		Local Authority: Purbeck District Council	
Site Area: c. 15 ha	Production: c. 200,000 tpa	Reserve: c. 2 million tonnes	

Impact Assessment Scoring

--	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain
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N.B. In response to previous assessments on an earlier and larger area, which indicated significant impacts from working, the site area has been reduced. This assessment is based on this reduced area.

Timescales for effects:

P/W: Preparation and Working

R/A: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	N/A	N/A	<ul style="list-style-type: none"> This Objective is not relevant to this site nomination 	<ul style="list-style-type: none"> N/A
2. To maintain, conserve and enhance biodiversity	-	0	<p>European/International Designations</p> <ul style="list-style-type: none"> Mineral extraction from within the proposed area may lead to effects on European/international designations from proximity and displacement of recreation. There may also be effects on species typical of European sites (including smooth snake, sand lizard, Dartford warbler, nightjar and woodlark). The revised site boundary will undoubtedly lead to smaller potential effects but these still cannot be discounted Area is used as recreation site contributing to the network of areas which help to reduce human 	<ul style="list-style-type: none"> Further assessment under the Habs Regs, including ecological surveys and hydrological reports, will be required when at planning application stage, with appropriate mitigation identified. The development guidelines have been modified to include specific mitigation measures identified through the Habitats Regulations Screening. Heathland restoration and public access to be created. Nature conservation designations to be removed from proposed development area, with appropriate boundary established. Modifications include the requirement for offsite mitigation

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<p>recreational pressure on designated heathlands, although the contribution of Great Plantation is probably small given its relative isolation from Wool and Wareham.</p> <ul style="list-style-type: none"> Working this area could lead to significant risk of adverse effects on European sites. Restoration to heathland/forestry with open access has the potential to restore these benefits. 	to be provided in advance of site development.
	-	0	<p>Annex 1 Bird Species</p> <ul style="list-style-type: none"> Area supports Annex 1 birds as part of the existing forestry crop rotation. Clearance of trees would result in heathland regeneration and the open habitat would rapidly become suitable for more Annex 1 birds. The site has the potential to be included in a revision to the Heathland SPA boundary. 	<ul style="list-style-type: none"> Ecological surveys and hydrological reports required, with appropriate mitigation Heathland restoration and public access to be created. Provision of an offsite heathland support area will compensate for effects on Annex 1 birds. Restoration to heathland (rather than forestry plantation) will also ensure potential benefits to Annex 1 birds are realised after mineral extraction is complete. These issues are specifically addressed through a development guideline proposed as a modification.
	?	+		
	-	0	<p>National Designations</p> <ul style="list-style-type: none"> Area likely to support rich invertebrate assemblage in existing rides contributing to maintenance of species within SSSI. Restoration should include appropriate habitats to support invertebrates. 	<ul style="list-style-type: none"> Ecological assessment (Phase 2 invertebrate surveys) will be needed to fully assess the impacts of mineral extraction to ensure the proposals do not lead to unacceptable impacts. Restoration to include creation of invertebrate habitat. Restoration to heathland rather than forestry plantation will be key in mitigating effects on species linked to the SSSI. If the overall area of open heathland is increased there is potential to increase key invertebrate populations. This issue is covered through a development guideline proposed as a modification.
	--	+		

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	-	0	<p>Protected species</p> <ul style="list-style-type: none"> The revised site boundary will reduce impacts on protected species, but impacts are still likely. These species include EPS reptiles, Annex 1 birds, and many NERC priority species/UK protected species of bird, reptile and invertebrate. 	<ul style="list-style-type: none"> Full assessment of effects on all these species will be needed to ensure proposed mitigation is adequate. Ecological surveys required, with appropriate mitigation identified. Restoration to heathland rather than forestry plantation will be key in mitigating effects on protected species, but may not be enough to fully mitigate effects on European species. This issue is covered through a development guideline proposed as a modification.
	-/?	0	<p>Local recognitions/designations, including ancient woodland and veteran trees</p> <ul style="list-style-type: none"> There are possible adverse implications for the Stokeford Heaths SNCI to the north of the proposed area, although through assessment it should be possible to avoid adverse effects on the SNCI. 	<ul style="list-style-type: none"> Ecological surveys required, with appropriate mitigation identified. Restoration to include consideration of possible benefits for the SNCI.
3. To maintain, conserve and enhance geodiversity.	+	0	<ul style="list-style-type: none"> Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration. 	<ul style="list-style-type: none"> Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	-	0	<p>Groundwater</p> <ul style="list-style-type: none"> Watercourse rises/runs within 50m of proposed development area. Assessment required to determine possible impacts on hydrogeology and effects on the stream. Impacts to be appropriately mitigated. No impacts on Source Protection Zones. Site overlies secondary aquifer. 	<ul style="list-style-type: none"> Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. Further assessment on possible impacts on water supplies and appropriate mitigation if potential impacts identified. Where necessary mitigating measures should be installed to maintain groundwater levels and/or monitor private water supplies. Alternative arrangements should be in place in case of a reduction in supply.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	-	0	<p>Surface Water</p> <ul style="list-style-type: none"> Watercourse rises/runs within 50m of proposed development area. 	<ul style="list-style-type: none"> Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. Any fuel on site should be properly stored to avoid contamination in case of spillage. Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. Land Drainage Consent to be obtained from Dorset County Council is works may affect flow of an ordinary watercourse.
5. To reduce flood risk and improve flood management.	0	0	<p>Flooding/Coastal Stability</p> <ul style="list-style-type: none"> The site is in Flood Risk Zone 1 and working is not considered to constitute, or exacerbate an existing, a flood risk. Negligible/No impact, during working and restoration. 	<ul style="list-style-type: none"> Flood Risk Assessment (FRA) will be required.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).	-	0	<p>Archaeology</p> <ul style="list-style-type: none"> Two scheduled monuments (SM28379, a bowl barrow and SM28382, a section of Battery Bank) lie in the vicinity of the boundary of the proposed site, with two others (SM28380, a bowl barrow) and SM28381, another bowl barrow) further away. They are located approximately in a line that is oriented north to south. The three barrows are set on the ridge that runs to the east of Baker's Well Valley. It is assumed that they would have been deliberately placed in these prominent positions at a time when the land cover would have been heathland rather than woodland. The barrows would have been clearly visible from the valley as well as other vantage points in the 	<ul style="list-style-type: none"> Archaeological survey to assess Monuments and establish their settings and how these can best be protected during working. Archaeological survey to assess possible presence and significance of non-designated remains. Adequate provision to be made for preservation, excavation or recording, as appropriate. Settings of the Monuments to be established prior to working and not to be compromised during working. An additional development guideline is included as a modification to provide detail on the setting assessment.
	--	+		

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<p>wider landscape. There is also a water course that runs through the valley and it is likely that the barrows would have been deliberately placed overlooking this. To the east of the barrows, the land is level with no clear edge to the ridge.</p> <ul style="list-style-type: none"> • Since a major part of the setting of the barrows essentially comprises the ridge and the valley to the west, it is important to preserve these landscape elements • A section of Battery Bank is also present within the valley. Whilst the section to the east of the track appears well-preserved, the section to the west appears to have been lost. Battery Bank is thought to have consisted of sections historically to act as markers separating the Frome Valley from land to the north. It is unclear whether this section of Battery Bank was placed alongside the barrows deliberately or not. • The level of protection afforded to the Scheduled Monuments and their setting could lead to parts of the site being excluded from quarrying. • Serious consideration needs to be given to how the proposed site might be developed, through assessment and evaluation that considers the Scheduled Monuments and their settings and also the impact on other below-ground archaeology. Continuing dialogue with English Heritage is also important. It may be possible to come to a compromise that allows quarrying on part of the site. • Restoration to open heathland could improve the settings of the Monuments. 	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	<p style="text-align: center;">-</p> <p style="text-align: center;">+</p> <p style="text-align: center;">--</p>	+	<p>Historic Landscapes</p> <ul style="list-style-type: none"> • Much of the site, with the possible exception of the lower part of Baker's Well Valley, would have been heathland before the woodland was planted. • This heathland formed part of the setting of the Scheduled Monuments on the site. • Unsympathetic extraction and quarrying could have a significant negative impact on the setting of these Monuments, but there is the potential for an improvement in that setting through restoration to heathland. 	<ul style="list-style-type: none"> • Archaeological survey to assess Monuments and establish their settings and how these can best be protected during working. • Restoration to heathland to benefit Monuments and their settings. • An additional development guideline is included as a modification to provide detail on the setting assessment.
	-	0	<p>Historic Buildings</p> <ul style="list-style-type: none"> • The nearest listed building which may have views of part of the site across fields is Heath View • Maintenance/build-up of vegetation around the edge of the site will increase screening and restrict views in. • If views into the site are still possible, restoration of the site should restore landscape texture and qualities thus the impact is time limited on this building. 	<ul style="list-style-type: none"> • Strengthen screening of the site where possible. • Restoration to open space/heathland will improve views into site area.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	<p style="text-align: center;">-</p> <p style="text-align: center;">--</p>	0	<p>Landscape Capacity</p> <ul style="list-style-type: none"> • The site is spread across a south facing slope, with a total variation of approximately 20m. The scale of excavations, in combination with the orientation of the slope, mean that operations will be visible from elevated locations, such as the Purbeck Hills. From here the development may have adverse effects, when considered individually, as well as cumulative adverse effects in combination and sequence with existing sites. However, the reduced scale of the allocation and proposed landscape 	<ul style="list-style-type: none"> • Landscape and visual impact assessment to identify impacts; adequate mitigation of such impacts before and during working. If mitigation is not possible, a view will have to be taken as to whether a time-limited impact would be acceptable. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy. • Maintain screening woodland around edges of site.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<p>buffer along the southern boundary are considered to reduce the potential landscape and visual impacts to an acceptable level.</p> <ul style="list-style-type: none"> If the developer can provide modified proposals that do not cause significant harm to views from the Purbeck Hills, and evidence to demonstrate the effects on these views, the capacity of this site could potentially be increased. 	<ul style="list-style-type: none"> Restoration to enhance landscape for views into site.
	-		<p>Designated Landscapes</p> <ul style="list-style-type: none"> Potential for significant adverse impact during working, through views into the site from the Purbeck Hills. 	
	--	0		
8. To protect and improve air quality and reduce the impacts of noise.	0	0	<ul style="list-style-type: none"> Impacts on air quality expected to be negligible. No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site. 	<ul style="list-style-type: none"> Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	-	0	<ul style="list-style-type: none"> The site comprises primarily heathland, grassland and woodland cover. The area is a former heathland area and so would be expected to have relatively poor, acidic soils. Site preparation/working would require stripping and storage of the soils, with some impacts on them. If the site is worked and restored to heathland this will require reinstatement/retention of acidic soils. 	<ul style="list-style-type: none"> Soil is poor quality in agricultural terms but valuable in terms of potential for heathland restoration. Soils to be stored/protected during preparation and working and properly reinstated during restoration.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
10. To conserve and safeguard mineral resources.	+	0	<ul style="list-style-type: none"> In terms of encouraging the most efficient use of resources, this site is considered to provide a mild/strong positive impact as it constitutes an extension of an existing working and would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole. 	<ul style="list-style-type: none"> No specific action required; site development to take into consideration and mitigate where appropriate relevant impacts.
11. To promote the use of alternative materials.	0	0	<ul style="list-style-type: none"> This proposal does not at present promote the use of alternative materials. 	<ul style="list-style-type: none"> No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	++	0	<ul style="list-style-type: none"> Development of this site will provide a strong benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective. 	<ul style="list-style-type: none"> Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0/?	<ul style="list-style-type: none"> This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. Minerals development can have negative impacts on other economic development, both locally and further away – through noise, dust, traffic and so on. 	<ul style="list-style-type: none"> Assessment of potential impacts will be required, to identify possible impacts and ensure these are satisfactorily mitigated. Some combination of forestry and heathland may be achievable.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<ul style="list-style-type: none"> It is considered that this proposal will provide a strong benefit during site working. Restoration to forestry could provide on-going economic benefits; however, restoration to open access heathland is considered preferable in biodiversity terms and could provide limited economic benefits. 	
14. To adapt to and mitigate the impacts of climate change.	-	0	<ul style="list-style-type: none"> Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small. 	<ul style="list-style-type: none"> Use energy efficient plant and machinery. Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna. Clarification regarding restoration is provided through an additional development guideline
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any	-	0	<ul style="list-style-type: none"> This proposal is for a large extension to an existing operation south of Puddletown Road. It is expected that an existing access would be used although it may be possible to provide a new access as long as it met the required visibility, geometry and surfacing requirements. 	<ul style="list-style-type: none"> Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network. Clarification of access proposals is provided through an additional development guideline

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
residual impacts.			<ul style="list-style-type: none"> Although the proposal is adjacent to and will comprise an extension of an existing quarry, that quarry is not currently operational. This proposal will therefore result in an increase in the number of vehicles on the Puddletown Road, gaining access to the strategic network via the C6 and Bere Regis to the west or via the A352 and A351 to the East. If the proposed site comes into operation after other works cease, there would be a 'Less Significant Adverse Impact' impact. However, should the site come forward in parallel with current operations, there will be 'Significant Adverse' impact. When the site comes forward, detailed traffic information will need to include vehicle routing and a consideration of impact along those routes. Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network. 	
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	-	0	<ul style="list-style-type: none"> The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy. 	<ul style="list-style-type: none"> Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life	0	0	Impact on Sensitive Human Receptors	<ul style="list-style-type: none"> Retain screening vegetation where appropriate and provide other

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
of the population	-		<ul style="list-style-type: none"> Closest residences are approximately 200m to the west, others within 250-500 m buffers around site, including Hethfelton House. Site is relatively isolated from residences and has the potential to be well screened. With further mitigation (noise attenuation and visual screening bunds) impacts on surroundings are expected to be minimal. Dust should not be an issue, and lorry traffic will not have any particular impact on these properties. 	mitigation as required, such as noise attenuation bunds.
	0	0	<p>Impact on Existing Settlements</p> <ul style="list-style-type: none"> Stokeford lies within approximately 400m of the site, while Wool and Bovington Camp are over 1km distant. The site is unlikely to have any impact on any of these sites. Lorries would travel northwards to the A35 and in so doing may have some impact on Bere Regis. 	<ul style="list-style-type: none"> Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network.
	-			
	0	0	<p>Impact on Airport Safety</p> <ul style="list-style-type: none"> No impacts expected. 	<ul style="list-style-type: none"> No action required.
18. To enable safe access to countryside and open spaces.	--	0/?	<p>Impact on Recreational Land</p> <ul style="list-style-type: none"> Although there are no formal rights of way or formal recreational uses on the site, as Forestry Commission land the site is available for public access. This would change during working but after restoration the site could be open to public access again. 	<ul style="list-style-type: none"> Alternative access routes/options to be identified and provided before working begins or the land is closed to public access. Restoration to open space with public access should be considered for its benefits, but could conflict with nature conservation aspirations. Specific mitigation has been included in the development guideline to include creation of an offsite heathland support area and network of paths around the site.
	--	0	<p>Impact on Public Rights of Way</p>	<ul style="list-style-type: none"> Restoration to open access land following working.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<ul style="list-style-type: none"> • There are no public rights of way over or adjacent to the site, but site is open access land. • Although there are no statutory rights of way, there is public access which serves to reduce pressure on areas of European designated heathland. This will be lost during preparation/working. • Restoration allowing public access will restore this function of the land. 	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
<ul style="list-style-type: none"> • Watercourses • Ponds/lakes, including wet habitats • Groundwater 	<ul style="list-style-type: none"> • The River Basin Management Plan South West River Basin District identifies the Frome as being of 'poor' environmental quality. Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licensed supplies. • Reduction in amount of ground water supplying the stream 	<ul style="list-style-type: none"> • Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Frome or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. • Ensure no impacts on stream in Bakers Well Valley. 	<ul style="list-style-type: none"> • Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating surface water features and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

that rises in Bakers
Well Valley.

Flood Risk Commentary

Site has been reduced in size, and remains entirely within Flood Zone 1.

Some theoretical risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Sand and gravel extraction is water compatible, so suitable in flood risk terms for allocation in the Mineral Sites Plan provided the appropriate hydrological assessment is carried out and a Flood Risk Assessment prepared and land within Flood Risk Zone 1 is available for location of processing facilities and stockpiles.

Suitable in flood risk terms for allocation in Mineral Sites Plan.

Cumulative Impacts

This proposal would be a follow-on development after completion of current working at Hines/Hyde Pits.

There would be no cumulative traffic impacts, provided there was no simultaneous working with existing sites.

There could be cumulative visual/landscape impacts, depending on how much of previous working at Hines/Hyde have been effectively restored when Great Plantation begun working. This should be addressed at the stage of the planning application. Full visual impact assessment will be required, to identify impacts and mitigation.

Developing the Great Plantation site, which would reduce the amount of public access land available, could lead to increased impacts on surrounding areas. **However, a development guideline has been included to ensure impacts are minimised through the creation of off-site heathland support area to mitigate displacement recreation. Offsite mitigation is also to be provided in advance of site development.**

The proposal is within 5Km (by road) of a site allocated in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy CEN) for development of 200 dwellings and community facilities, off Worgret Road, Wareham. Traffic arising from the new residential development will add to general traffic levels in Wareham and on the A352.

NB: Further work has been undertaken on cumulative impacts for all sites. This information is contained in a separate report that should be read alongside this report.

This further screening for cumulative impacts and in-combination effects indicates that there is potential for cumulative or in-combination effects in relation to biodiversity; human health; soil; air/dust; Greenhouse Gases; landscape and archaeology/heritage. Some effects are beneficial. There are potential inter-relationships between biodiversity and human health/amenity.

In most cases impacts would be expected in the short to medium term. In the longer term, as restoration proceeds, impacts are expected to reduce. The MPA is satisfied that identified impacts can be satisfactorily addressed by DGs and existing/proposed policy. Proposed DG requires cumulative impacts to be taken into consideration.

The restoration vision promotes long term benefits, including possible creation of heathland and multi-functional green infrastructure which is identified in the restoration vision, including recreational, landscape, biodiversity and amenity benefits.

As this site lies within the boundary of the Puddletown Road Area, Policy MS-7, a long term and coordinated approach to development, restoration and management will be sought within this area.

Viability

As an extension to an existing operational site, viability is accepted. Great Plantation will use existing processing facilities, road access and serve existing markets, and therefore these do not have to be provided. The site is considered viable, for allocation in the Plan.

Heritage Impacts

There are a number of scheduled monuments in the vicinity, including one, a barrow, within 130m of the proposed extension. There are other barrows in the vicinity, which must be considered (along with their settings) in combination with each other. The impact the development of the site would have on the setting of these assets, and the considerable weight to be given to any harm to the setting of these assets, must be carefully considered against the public and other benefits of aggregate production.

Policy/Legislative Background

The Historic England website notes:

When making a decision on all listed building consent applications or any decision on a planning application for development that affects a listed building or its setting, a local planning authority must have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. Preservation in this context means not harming the interest in the building, as opposed to keeping it utterly unchanged.

This obligation, found in sections 16 and 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, applies to all decisions concerning listed buildings.

The recent Court of Appeal decision in the case of Barnwell vs East Northamptonshire DC 2014(2) made it clear that in enacting section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 (1) Parliament's intention was that 'decision makers should give "considerable importance and weight" to the desirability of preserving the setting of listed buildings' when carrying out the balancing exercise'.

Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (" the 1990 Act ") provides:

"(1) In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses."

Section 72 of the 1990 Act provides:

"(1) In the exercise, with respect to any buildings or other land in a conservation area, of any of the provisions mentioned in sub-section (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.

(2) The provisions referred to in sub-section (1) are the planning Acts ..."

A finding of harm to the setting of a listed building is a consideration to which the decision-maker must give "considerable importance and weight" (The Bath Society v Secretary of State for the Environment [1991] 1 W.L.R. 1303, per Glidewell LJ at 1319; and see East Northamptonshire District Council v Secretary of State for Communities and Local Government [2015] 1 W.L.R. 45 , per Sullivan LJ at [22]–[23] and [29]).

The relevant policies of the National Planning Policy Framework are paragraphs 128–135, the material parts of which provide:

"128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance... 129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise...

131. In determining planning applications, local planning authorities should take account of:

"• the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; ..."

132. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. ...

133. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply: ...

134. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

135. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset."

The National Planning Policy Framework (paragraph 144) also states:

When determining planning applications, local planning authorities should:

- give great weight to the benefits of the mineral extraction, including to the economy;

Commentary

In considering the potential development of the Great Plantation site, with acknowledged impacts on a designated heritage asset, the following points have been taken into consideration.

- There is "a strong presumption against harm to designated assets" (Barnwell [2014] EWCA Civ 137; Forge Field [2014] EWHC 1895 (Admin))
- "Considerable weight" must be given to harm to designated assets, however slight, if more than de minimis (Barnwell; Forge Field; Jones [2015] EWCA Civ 1243)
- *Mordue v Secretary of State for Communities and Local Government and others* [2015] EWCA Civ 1243. Heritage assets have statutory protection, unlike other material considerations; and the NPPF has a complex template for their consideration. Both must be considered in an assessment.
- Failure to assess alternative sites on appropriate public interest criteria (Forge Field; ENV4)
- The policy presumption in favour of sustainable development does not apply to cases of harm to designated assets (Gladman [2016] EWHC 421 (Admin))
- Cumulative effects must be considered (PPG)
- All recognised harm must be included in the recommended Planning balance (Barnwell)
- Undue weight should not be given to the temporary nature of development (National Wind Power [1999] N.P.C. 128)

Development of the site would not cause substantial harm to the scheduled monuments, but would have an impact on its setting. Development of the site would result in temporary harm to the setting of the heritage assets - this would be 'less than substantial' harm, for a temporary period. This harm has been given great and considerable weight in this assessment.

A range of sites nominated for allocation in the Mineral Sites Plan for sand and gravel quarries have been assessed on heritage grounds and on a range of other grounds. A number have been rejected for reasons other than heritage issues. The remaining sites have been included in the Draft Mineral Sites Plan.

The proposal is for a temporary period, after which the site will be restored and the impact on the heritage asset setting will be removed.

The Heritage Impact Assessment that would be carried out as part of any planning application would identify the setting of the heritage asset and would identify appropriate mitigation to offset the harm to the setting resulting from development of the site to a level that would allow the development to go ahead.

It is expected that the mitigation would be a combination of screening (an earth bund) and a standoff/buffer.

If mitigation is not possible, or if the necessary standoff was such that it made the site uneconomic to develop, then the development would not go ahead.

In considering potential impacts and mitigation, it must be remembered that this is not a planning application, but a nomination for allocation of a site in the Mineral Sites Plan. The evidence required and level of assessment carried out at this stage are considered to be proportionate and appropriate. At the planning application stage a detailed Heritage Impact Assessment on the assets and their settings will be carried out, as part of an Environmental Impact Assessment, and the appropriate mitigation identified and applied.

At the current stage, the Mineral Planning Authority is considering whether the proposed nomination can reasonably be allocated through the Mineral Sites Plan, on the understanding that appropriately detailed assessment work will be carried out at a later date, and appropriate mitigation applied.

Although inclusion in an adopted plan gives a site allocation greater weight and likelihood of development, it is not deemed planning permission. Any allocation in an adopted plan still needs to go through the full planning application process, including Environmental Impact Assessment, and if impacts are identified that cannot be satisfactorily mitigated, the proposal will not receive permission.

It is considered, taking into account:

- the less than substantial harm to the setting of the scheduled monuments;
- the great and considerable weight given to such harm, and the strong presumption against such harm;
- the temporary nature of the harm
- the great weight to be given to the provision of mineral
- the fact that minerals must be worked where they are found
- the fact that this is an extension site, and the processing plant and other infrastructure is already available
- the fact that the proposed development will be subject to planning application including Environmental Impact Assessment, and impacts on the setting will be assessed in detail and appropriate mitigation identified

that the public benefit to be received from this proposed development, and the nature and duration of the development causing harm, together with the scope for mitigating this harm, are such that the site should be allocated in the Mineral Sites Plan.

Summary

Potential Benefits	Potential Impacts
<ul style="list-style-type: none"> • Restoration to heathland would provide habitat for protected species and improve linkages between other heathland in the area. • Creation of an offsite heathland support area to mitigate displacement recreation • Provision of aggregates required for maintenance and construction. • Restoration to heathland could benefit Scheduled Monuments and their settings and provide a link to 	<ul style="list-style-type: none"> • Site preparation and working will have potentially very significant impacts on the Scheduled Monuments and their settings. Mitigation to be identified and implemented. • There will also be potentially very significant be impacts on the heathland habitats on the site and on the reptiles and Annex 1 birds supported. • Visual impacts on designated landscapes to the south.

the historic landscape that would have previously characterised the area around this site.

- The site is relatively remote and well screened visually by existing vegetation. With mitigation such as noise attenuation bunds and visual screening along the southern boundary of the site particularly the impacts during preparation and working will be reduced.

- Temporary loss of open access land and possible recreational displacement to designated sites.

Overall Recommendation:

Originally, a relatively large area was nominated for consideration. It had high biodiversity and landscape importance, and potentially significant impacts could result from its working. It is open access land and removal of this access opportunity could lead to impacts on other designations in the area.

There would also have been significant impact on heritage assets – scheduled monuments - in the area.

The site has the potential to make a contribution to the supply of aggregates in Bournemouth, Dorset and Poole. It is largely relatively well screened site which would be a follow-on from an area that has been previously worked. It is expected that processing plant will be located on the site.

The importance in terms of biodiversity and access opportunity, archaeological and landscape impacts indicates that the development of the whole site, even in phases, would be unacceptable. Although the principle of some working on the site is accepted, the area to be worked needs to be significantly reduced in area, to leave an area in the northern part of the site adjacent to previous workings that would be acceptable. If the site is reduced in area and the remaining area justified, it should be possible to see some aggregate working on this site.

Following previous assessments and the above findings/conclusions, the site nominee has significantly reduced the site area in scale to a size that could be worked satisfactorily, provided full assessments were carried out in advance, impacts and potential impacts identified and appropriate mitigation identified.

It is recognised that further reductions in size may be necessary to adequately offset the impact on the heritage assets. However, restoration to heathland will in the long term provide a benefit, in terms of restoration of the wider setting in which they would once have sat.

Landscape/visual assessment, and Appropriate Assessment, will be required. Mitigation should include an offsite heathland support area to provide compensatory habitat for Annex 1 birds which may be functionally linked to the Dorset Heathlands SPA. Restoration will also be key and the emphasis should lie on creation of heathland rather than replanting for forestry.

It is considered that the proposed site has been reduced in size, and mitigation such as alternative access areas provided, such that the current site proposal is considered appropriate for allocation in the Bournemouth, Dorset and Poole Mineral Sites Plan.

Updated Recommendation (February 2019)

A series of additional development guidelines are proposed as modifications to the Mineral Sites Plan. These modifications provide additional details regarding mitigation measures that will reduce the impacts of working and provide some benefits both during working and through restoration. The site therefore remains appropriate for allocation in the Bournemouth, Dorset and Poole Mineral Sites Plan.

Aggregates: AS12 Philliol's Farm

NB: A modification has been proposed to not take this site forward for allocation, therefore this appraisal has not been updated (February 2019)

Site Name/Location: AS12 Philliol's Farm Mineral Type: Sand and gravel	Nominee: Drax Estate and another. Local Authority: Purbeck District Council	Site Area: approximately 67 ha Production: c. 200,000 tpa Reserve: approximately 1.5 mt
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Impact Assessment Scoring

-	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain
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Timescales for effects:

P/W: Preparation and Working

R/A: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	N/A	N/A	<ul style="list-style-type: none"> This Objective is not relevant to this site nomination 	<ul style="list-style-type: none"> N/A
2. To maintain, conserve and enhance biodiversity	--	0	<p>European/International Designations</p> <ul style="list-style-type: none"> There are possible indirect effects on European heathland sites as the extraction area lies adjacent along part of the northern boundary, the mineral haul route is currently unspecified but likely to be through Wareham Forest so could pass close to the designated areas. 	<ul style="list-style-type: none"> Ecological surveys, visitor surveys and hydrological reports required, with appropriate mitigation to be identified and implemented.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	-		<ul style="list-style-type: none"> Displacement of recreation due to the haul route must be taken into consideration, and mitigated against. The haul route is likely to pass through forestry areas which support Annex 1 birds which may be functionally linked to Dorset Heathlands SPA and the plantation is well used as recreation site contributing to the network of areas which help to reduce human recreational pressure on designated heathlands. Without the detail of proposed working there is a risk of adverse effects on European sites but this risk could almost certainly be removed through careful planning. 	
	--		<p>Annex 1 Bird Species</p> <ul style="list-style-type: none"> Area through which the haul route is likely to pass supports Annex 1 birds as part of the existing forestry crop rotation. Clearance of trees would result in heathland regeneration and the open habitat would rapidly become suitable for more Annex 1 birds. The site has the potential to be included in a revision to the heathland SPA boundary. Risk based approach essential here. Without the detail of proposed working there is a risk of adverse effects to Annex 1 birds but this risk could almost certainly be removed through careful planning. 	<ul style="list-style-type: none"> Ecological surveys, visitor surveys and hydrological reports required, with appropriate mitigation to be identified and implemented.
	?	0		
	--		<p>National Designations</p> <ul style="list-style-type: none"> The Morden Bog and Hyde Heath SSSI lies adjacent to the proposed area, and the mineral haul route may run close to the SSSI. The possibility of indirect effects exists. Without the detail of proposed working there is a risk of adverse effects to the SSSI but this risk could 	<ul style="list-style-type: none"> Ecological surveys and hydrological reports required, with appropriate mitigation to be identified and implemented.
	?	0		

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			almost certainly be removed through careful planning.	
	--	0	<p>Protected species</p> <ul style="list-style-type: none"> Existing rides support significant populations of European protected species, Sand Lizard and Smooth Snake, and common protected reptiles. Depending on the alignment of the haul route, mitigation for effects on reptiles may be necessary. If so, it seems likely NE would be able to issue a disturbance licence if required. There are records of Fairy Shrimp from a pond at Philliol's Farm; this is a fully protected species under the Wildlife & Countryside Act and assessment of the implications of the development for this species will need to be fully assessed, especially as the species is known to flourish in temporary pools and mineral extraction would be likely to affect local hydrology. It is possible Dormouse lives in the hedgerows within the proposed area; mitigation should be possible. 	<ul style="list-style-type: none"> Protected species to be protected during working and their habitats enhanced during restoration where possible. Ecological surveys required, with appropriate mitigation identified. Restoration to include appropriate habitats for these species. Hydrological study required to demonstrate that Fairy Shrimp and its habitat will not to be affected by the development.
	?	+	<p>Local recognitions/designations, including ancient woodland and veteran trees</p> <ul style="list-style-type: none"> There are a number of old boundary trees, mainly oak, within the proposed area and the implications for the biodiversity and longevity of these trees must be assessed. Trees to be protected during working and their habitats enhanced during restoration where possible. 	<ul style="list-style-type: none"> Ecological surveys required, with appropriate mitigation identified.
3. To maintain, conserve and enhance geodiversity.	+	0	<ul style="list-style-type: none"> Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration. 	<ul style="list-style-type: none"> Operator to be asked to permit visits to view exposures as required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	-	0	<p>Groundwater</p> <ul style="list-style-type: none"> Ditches in proximity to site, which are presumably groundwater fed. No Source Protection Zones are affected by the site. Site overlies secondary aquifer. Environment Agency concerns over effects of extraction on groundwater feeding ephemeral pond supporting Fairy Shrimp. 	<ul style="list-style-type: none"> Further assessment on possible impacts on water supplies and appropriate mitigation if potential impacts identified. Where necessary mitigating measures should be installed to maintain groundwater levels and/or monitor private water supplies. Alternative arrangements should be in place in case of a reduction in supply. Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. Any fuel on site should be properly stored to avoid contamination in case of spillage. Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	?			
-	0	<p>Flooding/Coastal Stability</p> <ul style="list-style-type: none"> Site is FRZ 1 but is adjacent to FRZ 2 and 3. Site is sand and gravel site, with extraction allowed within functional floodplain. 	<ul style="list-style-type: none"> Flood Risk Assessment (FRA) will be required. All necessary mitigation to be implemented. 	
0				0

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<ul style="list-style-type: none"> Flood Risk Assessment to be carried out and any necessary mitigation implemented. 	
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).	?	0	<p>Archaeology</p> <ul style="list-style-type: none"> An archaeological evaluation consisting of the excavation of trial trenches was undertaken on parts of this site in 2005 by Thames Valley Archaeological Services. Little was found in many of the trenches, but evidence of Roman settlement was found in the southernmost part of the site. Thus, unless the area of Roman remains is excluded from quarrying, the development is likely to have a significant impact on archaeological remains. The fields that were not included in the 2005 evaluation still need to be evaluated before a fully-informed planning decision can be made, and the results could possibly show further very significant archaeological impacts. The impact on the setting of nearby barrows that are protected as Scheduled Monuments also needs to be assessed. 	<ul style="list-style-type: none"> Full archaeological survey of the area required to assess possible presence and significance of non-designated remains and to assess Monuments and establish their settings and how these can best be protected during working. All necessary mitigation, including actions such as restoration of hedgerows, to be implemented. Adequate provision to be made for preservation, excavation or recording, as appropriate. Settings of the Monuments to be established prior to working and not to be compromised during working.
	--		-	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	-		<p>Historic Buildings</p> <ul style="list-style-type: none"> • There are two Grade II listed buildings located within the centre of the proposed site at Philliol's Farm. The first is a 1748 brick built barn with later attached out-buildings, a corrugated iron roof with coped gables and a projecting hipped cart porch on the south side. The second is a detached two-storey granary dating from the 18th century having a tiled roof with stone eaves courses and moulded coped gables which was formerly listed as a pigeon house at Philliol's Farm. The buildings are set within a farmstead (although the original farmhouse doesn't survive) within a flat farmed landscape. • Both buildings, although most notably the granary, are in some state of disrepair. • The proposed extraction would take place in phases around the central farm, with restoration to agriculture at a lower level behind each phase. There would be no processing of materials on site. • There is no significant visual or noise impacts on the listed buildings because they are not inhabited by people. However, there will be an impact to the setting of the heritage assets, causing less than substantial harm, and this has to be given great and considerable weight. • On completion the whole farmstead will sit on an island of raised ground however this would not compromise the setting of the buildings. • There is an opportunity for improving the condition of both listed buildings through repair and stabilisation of the structure by means of planning conditions. 	<ul style="list-style-type: none"> • Further assessment of the buildings prior to working to ensure they will not be damaged by changing ground conditions. • Detailed Heritage Assessment will be required, to identify the setting of the Listed Buildings and the mitigation required to appropriately protect the setting, taking into account the harm to the setting and the weight given to the importance of the Listed Buildings. • Restoration to include improvement of the listed buildings. • If the proposed development cannot be satisfactorily mitigated, it will not proceed.
	--	+		

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	-	?	<p>Landscape Capacity</p> <ul style="list-style-type: none"> This is considered to be an intimate and sensitive part of the Heath Forest Mosaic. Development would affect the existing rural character and views from close proximity sensitive visual receptors (residential and bridleway). It would introduce a new obtrusive use into this landscape. The capacity to 'absorb' this proposed development is low without mitigation and medium/low with mitigation. 	<ul style="list-style-type: none"> Landscape and visual impact assessment to identify impacts; adequate mitigation of such impacts before and during working. If mitigation is not possible, a view will have to be taken as to whether a time-limited impact would be acceptable. Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy. Maintain screening woodland around edges of site.
	--		<p>Designated Landscapes</p> <ul style="list-style-type: none"> No impacts expected. 	
8. To protect and improve air quality and reduce the impacts of noise.	0	0	<ul style="list-style-type: none"> Impacts on air quality expected to be negligible. No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site. 	<ul style="list-style-type: none"> Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	-	0	<ul style="list-style-type: none"> Some 75% of the site is identified as 'Best and Most Versatile' (BMV) agricultural land. Working the site will have impacts on this soil. Soils will be protected during working and restoration could bring BMV land back into agricultural production. Alternatively, or in conjunction with this, areas of the site could be restored to a nature conservation use possibly with some public access. 	<ul style="list-style-type: none"> Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working. Restoration to include high quality agricultural land, possibly with other uses as well.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
10. To conserve and safeguard mineral resources.	+	0	<ul style="list-style-type: none"> The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole. However there are a number of issues to be addressed in the working of the site. 	<ul style="list-style-type: none"> No specific action required; site development to take into consideration and mitigate where appropriate relevant impacts.
11. To promote the use of alternative materials.	0	0	<ul style="list-style-type: none"> This proposal does not at present promote the use of alternative materials. It is possible that treated inert waste will be used in restoration of the site, but this will not directly promote the use of alternative materials. 	<ul style="list-style-type: none"> No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	<ul style="list-style-type: none"> Development of this site will provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective. 	<ul style="list-style-type: none"> Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	<ul style="list-style-type: none"> This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. However given the expected size of the reserve this is likely to be a limited benefit. 	<ul style="list-style-type: none"> Identification of potential impacts on local businesses, with appropriate mitigation. Further assessment required to form a view as to what the most appropriate restoration could be.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	?		<ul style="list-style-type: none"> The development and associated traffic could have negative impacts on local businesses, e.g. through dust/noise/traffic. These should be taken into consideration and mitigated against. Restoration to agriculture with some element of public access will, if achieved, offer some economic benefits through both the agriculture and the recreational attraction and use in the wider area (i.e. riding, walking). 	
14. To adapt to and mitigate the impacts of climate change.	-	0	<ul style="list-style-type: none"> Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. Inclusion of some form of vegetated environment in the final restoration will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small. 	<ul style="list-style-type: none"> Use energy efficient plant and machinery. Implement restoration which includes appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	-	0	<ul style="list-style-type: none"> This is a large, new, sand and gravel extraction site. Estimated trip rates have been given at about 100 per day. The local road network to the south and west of the site is unable to cater for this level of heavy traffic. The proposed use of these roads would be objected to by the Highway Authority. Instead, access is proposed across Philliol's Heath, using existing forestry tracks, to the C7 at Sugar Hill. It should be possible to upgrade an existing 	<ul style="list-style-type: none"> Any proposal for this site will need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team. Transport Assessment to be carried out, identifying opportunities for reducing

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<p>access or provide a new access onto Sugar Hill that meets with the requirements for visibility and geometry necessary to serve this proposal. Once vehicles are on the C7 they can access the strategic network via the A35 to the north at Woodbury Cross.</p> <ul style="list-style-type: none"> • Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network. 	<p>impacts on the transport network.</p>
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	-	0	<ul style="list-style-type: none"> • The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy. 	<ul style="list-style-type: none"> • Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	---	0	<p>Impact on Sensitive Human Receptors</p> <ul style="list-style-type: none"> • Residences adjacent to/within 50m of the site; other residences in vicinity of site. • Development would involve appropriate mitigation (such as visual and noise attenuation bunding, standoffs) to limit impacts. 	<ul style="list-style-type: none"> • Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to increase public access. • Screening/bunding/standoffs will mitigate impacts to some extent. • Transport Assessment to be carried out, identifying possible impacts and opportunities for reducing impacts on the transport network.
	-	0	<p>Impact on Existing Settlements</p> <ul style="list-style-type: none"> • Nearest settlement is Bere Regis, approximately 2.7 km away. No visual or noise impacts will affect these settlements, but there may be transport related impacts. 	
	0	0	<p>Impact on Airport Safety</p> <ul style="list-style-type: none"> • Site is approximately 25 km from Hurn Airport, with possibly some wet/wetland restoration. 	<ul style="list-style-type: none"> • No impacts expected.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
18. To enable safe access to countryside and open spaces.	0	+	Impact on Recreational Land <ul style="list-style-type: none"> Site is in agricultural use, with no formal/informal recreation on the site. The proposed haul road to the public highway will run through land used for recreation, and could have recreational displacement effects which must be addressed and mitigated. 	<ul style="list-style-type: none"> No action required at the site itself; haul route to be carefully selected to ensure no recreational displacement. Restoration to include some aspect of public access.
	--			
	-	0	Impact on Public Rights of Way <ul style="list-style-type: none"> There are no rights of way across the site, although a bridleway runs adjacent to section of site boundary and will require screening. Impact likely to be relatively small. 	<ul style="list-style-type: none"> Assessment of impacts, with appropriate mitigation identified. Restoration to improve public access in the area.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
<ul style="list-style-type: none"> Watercourses Ponds/lakes, including wet habitats Groundwater 	<ul style="list-style-type: none"> Site is adjacent to River Piddle and Bere Stream. The River Basin Management Plan South West River Basin District identifies the Piddle as being of 'poor' environmental quality. Potential for contamination from runoff from site. Reduced agricultural runoff for a temporary period is a benefit. Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. Contamination of water supplies or reduction in amount of water available for licensed supplies. Impacts on or removal of surface water features, particularly with ecological implications. 	<ul style="list-style-type: none"> Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Piddle or groundwater unless any silt has first been removed. Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. On-going monitoring during development and working of the site. 	<ul style="list-style-type: none"> Full hydrogeological risk assessment Flood Risk Assessment Water Framework Assessment Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. Assessment of the feasibility of relocating ponds and associated habitats and species. Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is within Flood Zone 1, but close to Flood Zones 2 & 3.

Some theoretical risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Sand and gravel extraction is water compatible, so suitable in flood risk terms for allocation in Draft Mineral Sites Plan provided the appropriate hydrological assessment is carried out and a Flood Risk Assessment prepared.

Climate Change predictions may result in flood outlines greater than existing Flood Zone 2. Processing plant/storage/stockpiles should preferably be located in Flood Zone 1, and should be located as far from Flood Zones 2 & 3 as reasonably possible.

Viability

As a new, previously unworked, quarry site, viability does have to be considered. No specific assessment has been done by the Mineral Planning Authority, but it is considered that as the site has been strongly promoted for development in the past, this indicates that it has economic viability. It is expected that this economic viability remains.

Mineral has been proven. The site is considered viable, for allocation in the Plan.

Achieving a satisfactory access to/from the public road will be a key issue, but it is expected that this can be achieved, with input from Natural England.

Heritage Impacts

There are two Grade II listed buildings located within the centre of the proposed site at Philliol's Farm. The first is a 1748 brick built barn with later attached out-buildings, a corrugated iron roof with coped gables and a projecting hipped cart porch on the south side. The second is a detached two-storey granary dating from the 18th century having a tiled roof with stone eaves courses and moulded coped gables which was formerly listed as a pigeon house at Philliol's Farm. The buildings are set within a farmstead (although the original farmhouse doesn't survive) within a flat farmed landscape. Both buildings, although most notably the granary, are in some state of disrepair.

The proposed extraction would take place in phases around the central farm, with quick restoration to agriculture at a slightly lower level behind each phase. There would be no processing of materials on site.

There is no significant visual or noise impacts on the listed buildings because they are not inhabited by people.

On completion the whole farmstead will sit on an island of raised ground however this would not compromise the setting of the buildings.

There is an opportunity for improving the condition of both listed buildings through repair and stabilisation of the structure by means of planning conditions – this needs to be discussed with site promoter.

Policy/Legislative Background

The Historic England website notes:

When making a decision on all listed building consent applications or any decision on a planning application for development that affects a listed building or its setting, a local planning authority must have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. Preservation in this context means not harming the interest in the building, as opposed to keeping it utterly unchanged.

This obligation, found in sections 16 and 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, applies to all decisions concerning listed buildings.

*The recent Court of Appeal decision in the case of Barnwell vs East Northamptonshire DC 2014(2) made it clear that in enacting section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 (1) Parliament's intention was that **'decision makers should give "considerable importance and weight" to the desirability of preserving the setting of listed buildings' when carrying out the balancing exercise**.*

Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (" the 1990 Act ") provides:

"(1) In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses."

Section 72 of the 1990 Act provides:

“(1) In the exercise, with respect to any buildings or other land in a conservation area, of any of the provisions mentioned in sub-section (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.

(2) The provisions referred to in sub-section (1) are the planning Acts ...”

A finding of harm to the setting of a listed building is a consideration to which the decision-maker must give “considerable importance and weight” (*The Bath Society v Secretary of State for the Environment* [1991] 1 W.L.R. 1303, per Glidewell LJ at 1319; and see *East Northamptonshire District Council v Secretary of State for Communities and Local Government* [2015] 1 W.L.R. 45 , per Sullivan LJ at [22]–[23] and [29]).

The relevant policies of the National Planning Policy Framework are paragraphs 128–135, the material parts of which provide:

“128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets’ importance and no more than is sufficient to understand the potential impact of the proposal on their significance... 129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise..

131. In determining planning applications, local planning authorities should take account of:

“• the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; ...”

132. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation. The more important the asset, the greater the weight should be. ...

133. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply: ...

134. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

135. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset.”

The National Planning Policy Framework (paragraph 144) also states:

When determining planning applications, local planning authorities should:

- *give **great weight** to the benefits of the mineral extraction, including to the economy;*

Commentary

In considering the potential development of the Philliol’s Farm site, with acknowledged impacts on a designated heritage asset, the following points have been taken into consideration.

- There is “a strong presumption against harm to designated assets” (*Barnwell* [2014] EWCA Civ 137; *Forge Field* [2014] EWHC 1895 (Admin))

- “Considerable weight” must be given to harm to designated assets, however slight, if more than de minimis (Barnwell; Forge Field; Jones [2015] EWCA Civ 1243)
- *Mordue v Secretary of State for Communities and Local Government and others* [2015] EWCA Civ 1243. Heritage assets have statutory protection, unlike other material considerations; and the NPPF has a complex template for their consideration. Both must be considered in an assessment.
- Failure to assess alternative sites on appropriate public interest criteria (Forge Field; ENV4)
- The policy presumption in favour of sustainable development does not apply to cases of harm to designated assets (Gladman [2016] EWHC 421 (Admin))
- Cumulative effects must be considered (PPG)
- All recognised harm must be included in the recommended Planning balance (Barnwell)
- Undue weight should not be given to the temporary nature of development (National Wind Power [1999] N.P.C. 128)

Development of the site would not cause substantial harm to the Listed Buildings themselves, but would have an impact on their setting. Development of the site would result in temporary harm to the setting of the Philliol’s Farm buildings – this would be ‘less than substantial’ harm, for a temporary period. This harm has been given great and considerable weight in this assessment.

A range of sites nominated for allocation in the Mineral Sites Plan for sand and gravel quarries have been assessed on heritage grounds and on a range of other grounds. A number have been rejected for reasons other than heritage issues. The remaining sites have been included in the Draft Mineral Sites Plan.

The proposal is for a temporary period, after which the site will be restored and the impact on the heritage asset setting will be removed.

The Heritage Impact Assessment that would be carried out as part of any planning application would identify the setting of the heritage asset and would identify appropriate mitigation to offset the harm to the setting resulting from development of the site to a level that would allow the development to go ahead.

It is expected that the mitigation would be a combination of screening (an earth bund) and a standoff/buffer.

If mitigation is not possible, or if the necessary standoff was such that it made the site uneconomic to develop, then the development would not go ahead.

In considering potential impacts and mitigation, it must be remembered that this is not a planning application, but a nomination for allocation of a site in the Mineral Sites Plan. The evidence required and level of assessment carried out at this stage are considered to be proportionate and appropriate. At the planning application stage a detailed Heritage Impact Assessment on the assets and their settings will be carried out, as part of an Environmental Impact Assessment, and the appropriate mitigation identified and applied.

At the current stage, the Mineral Planning Authority is considering whether the proposed nomination can reasonably be allocated through the Mineral Sites Plan, on the understanding that appropriately detailed assessment work will be carried out at a later date, and appropriate mitigation applied.

Although inclusion in an adopted plan gives a site allocation greater weight and likelihood of development, it is not deemed planning permission. Any allocation in an adopted plan still needs to go through the full planning application process, including Environmental Impact Assessment, and if impacts are identified that cannot be satisfactorily mitigated, the proposal will not receive permission.

It is considered, taking into account:

- the less than substantial harm to the setting of the Philliol’s Farm farm buildings;
- the great and considerable weight given to such harm, and the strong presumption against such harm;
- the temporary nature of the harm
- the great weight to be given to the provision of mineral
- the fact that minerals must be worked where they are found

- the fact that this is an extension site, and the processing plant and other infrastructure is already available
- the fact that the proposed development will be subject to planning application including Environmental Impact Assessment, and impacts on the setting will be assessed in detail and appropriate mitigation identified

that the public benefit to be received from this proposed development, and the nature and duration of the development causing harm, together with the scope for mitigating this harm, are such that the site should be allocated in the Mineral Sites Plan.

Cumulative Impacts

There are both existing and proposed mineral workings in the locality. This is a new, greenfield site proposal and would represent an intensification of development in this part of Dorset, depending on its start date.

The proposal is within 5Km of Bere Regis, a “Key Service Centre” where new development of 50 dwellings is allocated in the Purbeck Local Plan Part 1 (Adopted Nov 2013) (Policy NW). Traffic development from the residential development will have a minor impact on surrounding roads.

It is in relatively close proximity to another site nomination, AS15 Tatchell’s Extension. Although the sites would be accessed differently, they would have cumulative traffic impacts if both worked simultaneously. In addition, at one stage it was proposed that Philliol’s Farm mineral would be processed at Tatchell’s. Again this could lead to cumulative impacts, depending on timing of working and methods. Such impacts should be identified and mitigated.

Traffic travelling north-west to access the trunk road system at Bere Regis or southwards to access at Wareham will both have some impact on the road system.

Summary.

Potential Benefits	Potential Impacts
<ul style="list-style-type: none"> • Restoration could include some increased public access. • Provision of aggregates required for maintenance and construction of the built environment. • Restoration could include benefits for nature conservation. • Restoration and improvements for the historic buildings at Philliol’s Farm 	<ul style="list-style-type: none"> • Impacts on biodiversity, particularly through construction/use of the haul road through the forest – including possible impacts on European designations and Annex 1 birds. • Hydrogeological impacts, including on water levels in the ephemeral ponds supporting the Fairy Shrimp. • Noise/visual/amenity impacts on properties in the vicinity. • Heritage impacts on the settings of the Philliol’s Farm farm buildings. • Potential archaeological impacts – details not known until further assessment carried out. • Impacts on landscape carrying capacity. • Impacts on Best and Most Versatile agricultural land. • Possible cumulative transport impacts – further assessment required.

Overall Recommendation:

This is a new site which would be worked and the mineral transported through Philliol’s Heath to the C7 road to be processed at Tatchell’s, near Wareham. It offers the benefits of contributing to the aggregate supply for

Bournemouth, Dorset and Poole but there are a number of potential impacts associated with the development of this site. These include biodiversity (particularly the haul road and possible impacts on European Designations in Wareham Forest), heritage impacts, hydrology/hydrogeology, archaeology, landscape capacity, loss of BMV land, amenity (impacts on residences in the vicinity) and transport issues. It is expected that these impacts are capable of mitigation.

The proposed development will cause less than substantial harm to the setting of the Listed Building but this harm is expected to be capable of mitigation.

On balance, it appears reasonable on the basis of evidence available that the impacts identified in this sustainability appraisal are capable of satisfactory mitigation to the extent that the site nomination can reasonably be included as an allocation in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Update Recommendation (February 2019)

A modification is proposed to remove this site from the Plan.

Aggregates: AS13 Roeshot Assessment (February 2019)

Site Name/Location: AS13 Roeshot		Nominee/Agent: Meyrick Estate/D K Symes	
Mineral Type: Sand and gravel		Local Authority: Christchurch Borough Council	
Site Area: approximately 74 ha	Production: 150,000 to 200,000 tpa	Reserve: approximately 3.5 mt	

Impact Assessment Scoring

-	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain
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Timescales for effects:

P/W: Preparation and Working

R/A: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	N/A	N/A	<ul style="list-style-type: none"> This Objective is not relevant to this site nomination. 	<ul style="list-style-type: none"> N/A
2. To maintain, conserve and enhance biodiversity	?	+	<p>European/International Designations</p> <ul style="list-style-type: none"> Extraction from this site could facilitate restoration to open ground including public open space for informal recreation to mitigate against effects of human pressures on the heaths. There are records of Southern Damsselfly from the Mude River on the eastern boundary of the site and the effects of extraction on this rare species would need to be fully understood and mitigated. It is expected that any effects should be avoided through providing for a suitable stand-off from the river. 	<ul style="list-style-type: none"> Ensure that part of the site is designated as a SANG Any possible impacts on Damsselfly and their habitat to be fully assessed, and all necessary mitigation implemented. Ecological surveys required, with appropriate mitigation identified. Restoration to include appropriate habitats for these species. Appropriate buffer around Mude to be left to protect Damsselfly habitat. A development guideline has been updated to include specific reference to the need for

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				<p>improvements to southern damselfly habitat.</p> <ul style="list-style-type: none"> The development guidelines have been modified to include specific mitigation measures identified through the Habitats Regulations Screening.
	0	0	<p>Annex 1 Bird Species</p> <ul style="list-style-type: none"> No impacts expected. 	<ul style="list-style-type: none"> No action required.
	0	0	<p>National Designations</p> <ul style="list-style-type: none"> No impacts expected. 	<ul style="list-style-type: none"> No action required.
	0	+	<p>Protected species</p> <ul style="list-style-type: none"> It is possible that there are common protected reptile populations around the existing field margins. Mitigation would likely be straightforward. 	<ul style="list-style-type: none"> Ecological surveys required, with appropriate mitigation identified. Restoration to include appropriate habitats for these species.
	0	0	<p>Local recognitions/designations, including ancient woodland and veteran trees</p> <ul style="list-style-type: none"> None expected. 	<ul style="list-style-type: none"> No action required.
3. To maintain, conserve and enhance geodiversity.	+	0	<ul style="list-style-type: none"> Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration. 	<ul style="list-style-type: none"> Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and	-	0	<p>Groundwater</p> <ul style="list-style-type: none"> EA designated main river adjacent to site and presumably receives groundwater discharge derived from the site. 	<ul style="list-style-type: none"> Further assessment on possible impacts on water supplies and appropriate mitigation if

<p>sea waters and manage the consumption of water in a sustainable way.</p>	--		<ul style="list-style-type: none"> • Site overlies secondary aquifers. Not within any Source Protection Zone designation. • Licensed extraction within 500m. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated. 	<p>potential impacts identified.</p> <ul style="list-style-type: none"> • Where necessary mitigating measures should be installed to maintain groundwater levels and/or monitor private water supplies.
	-	0	<p>Surface Water</p> <ul style="list-style-type: none"> • River Mude is a Main River and forms eastern boundary of the site. • Drains flow over site into river. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated. 	<ul style="list-style-type: none"> • Alternative arrangements should be in place in case of a reduction in supply. • Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • River Corridor Buffer Zone to be required. A development guideline has been included to ensure the creation of a buffer strip along the river Mude and to ensure that phasing of works ensure that only one side of the river is affected at any time. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality.

				<ul style="list-style-type: none"> Any fuel on site should be properly stored to avoid contamination in case of spillage. Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
5. To reduce flood risk and improve flood management.	0	0	Flooding/Coastal Stability <ul style="list-style-type: none"> FRZ 2 and 3 on part of site, majority within FRZ 1. Site is sand and gravel site, with extraction allowed within functional floodplain. 	<ul style="list-style-type: none"> Flood Risk Assessment (FRA) will be required. All necessary mitigation to be implemented.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).	??	0	Archaeology <ul style="list-style-type: none"> Staple Cross (Dorset M828) lies to the south of the proposed site. This is a roadside cross that is thought to be of post-Medieval date, although many of the type date from the Middle Ages. The railway line running on an embankment shields the site from this Monument therefore its setting is not affected by the proposal. There is likely to be high archaeological potential at this site. Archaeological assessment and evaluation would be required before an informed planning decision could be made. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from Very Significant to No Significant impact Archaeological assessment and evaluation will be required. When these have been undertaken archaeological impacts, if any, will be better understood. 	<ul style="list-style-type: none"> Full archaeological survey of the area required to assess possible presence and significance of non-designated remains and how these should be protected/treated during working. All necessary mitigation, including actions such as restoration of hedgerows, to be implemented. Adequate provision to be made for

	?	0	<p>Historic Landscapes</p> <ul style="list-style-type: none"> The site lies within the broad flat agricultural landscape between the river Avon on the west and the somewhat higher ground of the New Forest to the east. There are distant views to St. Catherine’s Hill, while views towards the historic centre of Christchurch are impeded by the railway line. Impacts could range between Significant to Less Significant. Further evaluation will be required. When this has been undertaken possible impacts, if any, will be better understood. 	<p>preservation, excavation or recording, as appropriate.</p>
	0	0	<p>Historic Buildings</p> <ul style="list-style-type: none"> The extraction of mineral at this site would have no significant impact on any of the nearby listed buildings because the lie of the land and the size of the hedgerows screens it from them. 	<ul style="list-style-type: none"> No action required.
<p>7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.</p>	-	+	<p>Landscape Capacity</p> <ul style="list-style-type: none"> The site is not directly overlooked by any properties but there are more distant views from the edge of Burton Village and from adjacent lanes. Retention and management of existing hedgerows, appropriate new planting and bund screening is recommended to reduce any residual impacts. Potential visual impacts also exist on the railway line and from users of the area for recreational purposes. 	<ul style="list-style-type: none"> Assessment of potential visual impacts required. All appropriate mitigation to be included. Restoration to include increasing public access/informal recreation, through provision of SANG. A development guideline has been proposed to ensure delivery of the SANG Restoration to include nature conservation interests.
	?	0	<p>Designated Landscapes</p> <ul style="list-style-type: none"> Potential visual impacts also exist on the New Forest National Park, but it is expected these can be mitigated. 	<ul style="list-style-type: none"> No action required. An additional development guideline has been included to ensure that any impact on the National Park and its setting is considered.

8. To protect and improve air quality and reduce the impacts of noise.	0	0	<ul style="list-style-type: none"> • Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site. 	<ul style="list-style-type: none"> • Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	-	0	<ul style="list-style-type: none"> • Site is very good agricultural land and working the site will have impacts on this soil. • Proposed restoration is to part agricultural part nature conservation. • Soils can be protected and used to restore at least part of the site to its agricultural use . 	<ul style="list-style-type: none"> • Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working. • Restoration to include high quality agricultural land.
10. To conserve and safeguard mineral resources.	+ / ++	0	<ul style="list-style-type: none"> • The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole. 	<ul style="list-style-type: none"> • No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	++	0	<ul style="list-style-type: none"> • In order to achieve desired restoration levels it may be necessary to install an inert waste material recycling facility. • If this is done then this will provide a strong positive benefit during working. It is expected that the recycling facility would finish when or soon after the quarry is completed and restored, giving a negligible impact during afteruse. 	<ul style="list-style-type: none"> • Developing an inert waste recycling facility will promote the use of alternative materials on-site and elsewhere.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+ / ++	0	<ul style="list-style-type: none"> • Development of this site will provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective. 	<ul style="list-style-type: none"> • Ensure principles of sustainable development are incorporated into the development of this site.

<p>13. To promote and encourage sustainable economic growth</p>	<p style="text-align: center;">+</p> <p style="text-align: center;">-</p>	<p style="text-align: center;">0</p>	<ul style="list-style-type: none"> • This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. However given the expected size of the reserve this is likely to be a limited benefit. • The development and associated traffic could have negative impacts on local businesses, e.g. through dust/noise/traffic. These should be taken into consideration and mitigated against. • Restoration to agriculture with some element of public access will, if achieved, offer some economic benefits through both the agriculture and the recreational attraction and use in the wider area (i.e. riding, walking). 	<ul style="list-style-type: none"> • Identification of potential impacts on local businesses, with appropriate mitigation. • Further assessment required to form a view as to what the most appropriate restoration could be.
<p>14. To adapt to and mitigate the impacts of climate change.</p>	<p style="text-align: center;">-</p>	<p style="text-align: center;">0</p>	<ul style="list-style-type: none"> • Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small. 	<ul style="list-style-type: none"> • Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
<p>15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.</p>	<p style="text-align: center;">-</p>	<p style="text-align: center;">0</p>	<ul style="list-style-type: none"> • While this large site is within Dorset, it is expected that the traffic from it will access the highway network on the A35 Lyndhurst Road from within Hampshire. A portion of the traffic will turn south from that access and enter Dorset on the A35 which will need to be assessed as part of any Transport Assessment. • Roads to the west of the site are narrow, residential and unsuitable for the high level of traffic that this site would generate. In the case of Hawthorne Road and Summers Lane they may also be undergoing significant change as part of the urban extension site 	<ul style="list-style-type: none"> • Any proposal for this site will need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport

			<p>at Roeshot Hill being proposed within the Christchurch and East Dorset Local Plan.</p> <ul style="list-style-type: none"> • Provided that the site has a suitable access onto the A35 Lyndhurst Road (to be determined by Hampshire County Council), the site has direct access to the strategic network and is considered to have negligible or no significant impacts. • Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network. 	<p>Development Management Team.</p> <ul style="list-style-type: none"> • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network. • Site to use access to highway network on the Hampshire side of the site. Hampshire and Dorset sides of the site shouldn't be worked simultaneously, to avoid traffic and visual impact intensification. For clarity an indicative access is proposed for inclusion on the Inset Map.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	-	0	<ul style="list-style-type: none"> • The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy. 	<ul style="list-style-type: none"> • Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	-	0	<p>Impact on Sensitive Human Receptors</p> <ul style="list-style-type: none"> • Waterditch Farm to north and Burton Village to west, both with 300m; properties to the south screened by railway embankment. • Appropriate mitigation (such as visual and noise attenuation bunding, standoffs) would limit impacts. 	<ul style="list-style-type: none"> • Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to increase public access. A
	-	0	<p>Impact on Existing Settlements</p> <ul style="list-style-type: none"> • Burton Village to west; properties (include Urban Extension) to the south screened by railway 	

			<p>embankment. Noise attenuation and visual screening expected to mitigate impacts.</p> <ul style="list-style-type: none"> • Appropriate mitigation (such as visual and noise attenuation bunding, standoffs) would limit impacts. 	<p>development guideline has been proposed to ensure delivery of the SANG</p> <ul style="list-style-type: none"> • Screening/bunding /standoffs will mitigate impacts. • Transport Assessment to be carried out, identifying possible impacts and opportunities for reducing impacts on the transport network.
	0	0	<p>Impact on Airport Safety</p> <ul style="list-style-type: none"> • Site is some 6km from airport and may feature wetland restoration. • It will be developed, worked and restored in a way that will avoid any birdstrike or other hazards. 	<ul style="list-style-type: none"> • Airport to be consulted on all aspects of the site development and restoration. It is proposed to add clarification to the development guidelines as this site lies within the Bournemouth Airport Aerodrome Safeguarding Area. Development will require an Aviation Impact Assessment. • All necessary mitigation to be implemented.
18. To enable safe access to countryside and open spaces.	0	+	<p>Impact on Recreational Land</p> <ul style="list-style-type: none"> • Site is agricultural land and has no formal or informal recreation use. • Part of the site expected to be used as Suitable Alternative Natural Greenspace to provide public access to countryside, primarily for the benefit of the housing proposed to the south. 	<ul style="list-style-type: none"> • No action required. • A development guideline has been proposed to ensure delivery of the SANG

	-	??	<p>Impact on Public Rights of Way</p> <ul style="list-style-type: none"> • Footpath runs along eastern edge of site - this may need to be diverted during working of the site. • Screening likely to be required, although the impact would be relatively small. • Potential for improved access following working. 	<ul style="list-style-type: none"> • Assessment of impacts, with appropriate mitigation identified.
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Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
<ul style="list-style-type: none"> • Watercourses • Ponds/lakes, including wet habitats • Groundwater 	<ul style="list-style-type: none"> • The River Basin Management Plan South West River Basin District identifies the River Mude as being of 'Moderate' environmental quality. Potential exists for contamination of river from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies. • Impacts on or removal of surface water features. 	<ul style="list-style-type: none"> • Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Mude or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. • Relocation of surface water features, provided this is feasible. 	<ul style="list-style-type: none"> • Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating or re-creating surface water features and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is largely within Zone 1, but part of it is within Zones 2 and 3, part of the floodplain of the River Mude.

Site is proposed for sand and gravel working which is compatible with fluvial floodplains. This will be taken into consideration at the planning application stage, in the design of the quarry working area and hydrology/hydrogeology – and also restoration

Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Sand and gravel extraction is water compatible, so suitable in flood risk terms for allocation in Draft Mineral Sites Plan provided the appropriate hydrological assessment is carried out and a Flood Risk Assessment prepared.

Climate Change predictions may result in flood outlines greater than existing Flood Zone 2. Processing plant/storage/stockpiles should preferably be located in Flood Zone 1, and should be located as far from Flood Zones 2 & 3 as reasonably possible.

Viability

As an extension to what will be an existing operational site, viability is not considered to be an issue. Existing processing facilities and road access will be used, and the site will serve existing markets, and therefore these do not have to be provided. Mineral has been proven. The site is considered viable, for allocation in the Plan.

Cumulative Impacts

Site is immediately adjacent to and will comprise an extension of a sand and gravel site in Hampshire. There are other sand and gravel sites in south Hampshire, south of the New Forest, that generate lorry travel into Dorset.

Traffic impacts can be mitigated in various ways, including by holding back quarry traffic during peak times.

It is adjacent to, although separated by a railway embankment, the site allocated for development in the Christchurch and East Dorset Consolidated Plan¹¹ May 2013, Policy CN1 Christchurch Urban Extension – 950 dwellings. Traffic from this development will add to traffic levels on the A35 and B3347.

It is expected that the Dorset part of the site will be developed as an extension to the Hampshire side, after the Hampshire side is partly or fully worked, so in this sense it will not be a cumulative impact in terms of traffic levels. **A modification is proposed to add additional text to clarify that there is to be no simultaneous extraction from the Dorset/Hampshire sides. This should minimise cumulative impacts and impacts due to intensification.**

Depending on rates of restoration in Hampshire there could be visual cumulative impacts – this issue would be addressed at the planning application stage. **An additional development guideline is proposed (through a modification) to ensure consideration is given to the impact of working on the National Park.**

NB: Further work has been undertaken on cumulative impacts for all sites. This information is presented in a separate document that should be read alongside this report. It indicates that there is potential for in-combination effects in relation to biodiversity; water environment, air/dust; Greenhouse Gases; and landscape. There are potential inter-relationships between biodiversity, air (dust), amenity and landscape.

In most cases impacts would be expected in the short to medium term. In the longer term, as restoration proceeds, impacts are expected to reduce. The MPA is satisfied that identified impacts can be satisfactorily addressed by DGs and existing/proposed policy.

Restoration will be to use as Suitable Alternative Natural Greenspace (SANG) for the housing proposed south of the site.

¹¹ The Consolidated Plan is an amalgamation of the Christchurch and East Dorset Core Strategy Pre submission draft April 2012 and the Christchurch and East Dorset Schedule of Proposed Changes November 2012.

Summary

Potential Benefits	Potential Impacts
<ul style="list-style-type: none"> • Restoration will include increased and improved public access through provision of land for SANG. • This also provides benefits to other nature conservation designations by absorbing recreational pressures. • Improvements to existing southern damselfly habitat within or adjacent to the allocated site • Provision of aggregates required for maintenance and construction of the built environment. May include production of recycled aggregates • Restoration will include benefits for nature conservation, through restoration to combination of agricultural and nature conservation. 	<ul style="list-style-type: none"> • Site is primarily agricultural land and its development will have minimal impact on nature conservation interests. • Nature conservation impacts – possible impacts on Southern Damselfly along Mude, However, additional development guidelines are proposed to minimise impacts. To be assessed and should be capable of mitigation, through various means including leaving a river corridor untouched. • Possible impacts on ground/surface water – including downstream on the Mude - to be fully assessed, expected to be mitigable. An additional development guideline is proposed to ensure careful management of water resources. • Possible impacts on archaeology – to be fully assessed and not expected to restrict development. All necessary mitigation to be implemented. • Burton Conservation Area lies to the west, but the lie of the land is such that the working is expected to be screened effectively. • Possible impacts on airport to be considered and site to be developed and restored in a way that does not have any impact on airport. An additional development guideline proposes to require an Aviation Impact Assessment. • Transport impacts to be assessed, but any impacts expected to be mitigable. • Site is large enough that visual impacts on surrounding properties are expected to be capable of mitigation.

Overall Recommendation:

Site is currently in intensive agriculture with limited access. It would be operated as an extension of an existing, adjacent quarry with mineral taken to existing plant to be processed. Mineral processing and site access will be carried out on the Hampshire side of the site. No intensification of working is expected.

Full assessment of possible impacts will be required. It is expected that these can be overcome through appropriate mitigation.

As an extension, development of the site is not expected to lead to intensification of impacts, but the time period of the impacts will be extended.

Opportunities for improved public access and nature conservation benefits are to be considered as part of restoration of the site.

On balance, it appears reasonable on the basis of evidence available that the impacts identified in this sustainability appraisal are capable of satisfactory mitigation and the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Updated Recommendation (February 2019)

A series of additional development guidelines are proposed as modifications to the Mineral Sites Plan. These modifications provide additional details regarding mitigation measures that will reduce the impacts of working and provide some benefits through restoration. The site therefore remains appropriate for allocation in the Bournemouth, Dorset and Poole Mineral Sites Plan.

Aggregates: AS15 Tatchell's Assessment (February 2019)

Site Name/Location: AS15 Tatchell's		Nominee/Agent: Aggregate Industries
Mineral Type: Sand and gravel		Local Authority: Purbeck District Council
Site Area: 2.5 ha	Production: approximately 100,000 tpa;	Reserve: approximately 330,000 tonnes Estimated reserve has been updated to 380,000 tonnes. This increase has been considered in the assessment review.

Impact Assessment Scoring

-	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain
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Timescales for effects:

P/W: Preparation and Working

R/A: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	N/A	N/A	<ul style="list-style-type: none"> This Objective is not relevant to this site nomination 	<ul style="list-style-type: none"> N/A
2. To maintain, conserve and enhance biodiversity	0	0	European/International Designations <ul style="list-style-type: none"> Not relevant to this site nomination. 	<ul style="list-style-type: none"> No action required.
	0	0	Annex 1 Bird Species <ul style="list-style-type: none"> Not relevant to this site nomination. 	<ul style="list-style-type: none"> No action required.
	0	0	National Designations <ul style="list-style-type: none"> Not relevant to this site nomination. 	<ul style="list-style-type: none"> No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0	Protected species <ul style="list-style-type: none"> It is possible that there are common protected reptile populations around the existing field margins. If any of these populations would be affected, mitigation would likely be straightforward. 	<ul style="list-style-type: none"> Ecological surveys required, with appropriate mitigation identified. Restoration to include appropriate habitats for these species.
	0	0	Local recognitions/designations, including ancient woodland and veteran trees <ul style="list-style-type: none"> Not relevant to this site nomination. 	<ul style="list-style-type: none"> No action required.
3. To maintain, conserve and enhance geodiversity.	+	0	<ul style="list-style-type: none"> Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration. 	<ul style="list-style-type: none"> Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	0	0	Groundwater <ul style="list-style-type: none"> Site overlies secondary aquifer. Not within any Source Protection Zone designation. Licensed extraction within 500m. Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated. 	<ul style="list-style-type: none"> Further assessment on possible impacts on water supplies and appropriate mitigation if potential impacts identified. Where necessary mitigating measures should be installed to maintain groundwater levels and/or monitor private water supplies. Alternative arrangements should be in place in case of a reduction in supply. Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. Detailed pollution prevention management plan detailing best practices to minimise pollution incidents, as well as measures that will be taken should a pollution event occur. Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality.
	?	0	Surface Water <ul style="list-style-type: none"> Pond within 50m of site in existing quarry to west of site. River Piddle within 250m of the site boundary. Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated. 	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				<ul style="list-style-type: none"> Any fuel on site should be properly stored to avoid contamination in case of spillage. Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
5. To reduce flood risk and improve flood management.	0	0	<p>Flooding/Coastal Stability</p> <ul style="list-style-type: none"> Entire site is within Flood Risk Zone 1, no expected risk of flooding or contributing to flooding. 	<ul style="list-style-type: none"> Flood Risk Assessment (FRA) will be required. All necessary mitigation to be implemented.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).	?	0	<p>Archaeology</p> <ul style="list-style-type: none"> Assuming the site was heathland until relatively recently, its archaeological potential is likely to be low. However, the Dorset Historic Environment Record records the presence of 19th century quarries on and around the site, so it would be appropriate for an assessment to check whether there are any remains of industrial archaeological significance of or associated with this quarrying on the site. If such remains were present, then provided that appropriate recording took place before development, this would be a 'Less Significant' impact. Archaeological assessment and evaluation will be required. When these have been undertaken archaeological impacts, if any, will be better understood. 	<ul style="list-style-type: none"> Archaeological survey of the area required to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working. All necessary mitigation to be implemented. Adequate provision to be made for preservation, excavation or recording, as appropriate. Further consideration to be given to restoration proposals, in terms of historic landscapes.
	?	0	<p>Historic Landscapes</p> <ul style="list-style-type: none"> The site is currently under agriculture, and historically it was presumably heathland. There is map evidence of quarrying here (undoubtedly on a much smaller scale) from the 19th century. 	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0	<p>Historic Buildings</p> <ul style="list-style-type: none"> The nearest listed building, Carey House, is hidden from the site by wooded areas so there is no significant effect on the listed building. No significant impact. 	<ul style="list-style-type: none"> No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	0	0	<p>Landscape Capacity</p> <ul style="list-style-type: none"> The site is considered unlikely to be visually intrusive being screened from the residential areas of Wareham and Northport by a ridge of high land. Appropriate mitigation will be required along the boundaries of the site. 	<ul style="list-style-type: none"> Landscape and visual impact assessment to identify impacts; adequate mitigation of such impacts before and during working. Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
	0	0	<p>Designated Landscapes</p> <ul style="list-style-type: none"> No significant impact/negligible. 	
8. To protect and improve air quality and reduce the impacts of noise.	0	0	<ul style="list-style-type: none"> Impacts on air quality expected to be negligible. No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site. 	<ul style="list-style-type: none"> Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	0	0	<ul style="list-style-type: none"> Site is poor quality agricultural land. Site preparation/working would require stripping and storage of the soils, with some impacts on them. 	<ul style="list-style-type: none"> Soils to be stored/protected during preparation and working and properly reinstated during restoration.
10. To conserve and safeguard mineral resources.	+	0	<ul style="list-style-type: none"> The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole. 	<ul style="list-style-type: none"> No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
11. To promote the use of alternative materials.	0	0	<ul style="list-style-type: none"> This proposal does not propose the use of alternative materials. 	<ul style="list-style-type: none"> No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	<ul style="list-style-type: none"> Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective. 	<ul style="list-style-type: none"> Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	<ul style="list-style-type: none"> This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. However given the expected size of the reserve this is likely to be a limited benefit. Restoration to agriculture will, if achieved, offer some on-going economic benefits. 	<ul style="list-style-type: none"> Further assessment required to form a view as to what the most appropriate restoration could be.
14. To adapt to and mitigate the impacts of climate change.	-	0	<ul style="list-style-type: none"> Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of 	<ul style="list-style-type: none"> Use energy efficient plant and machinery. Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			habitat for wildlife, but again these will be relatively small.	
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	-	0	<ul style="list-style-type: none"> This proposal is for an extension to existing extraction at Tatchell's Quarry. This is an established site with a good access onto Wareham Forest Road. Access from here to the strategic network is gained via the A35 to the north and the A351 to the east. The extension site could be expected to generate 40 trips per day although it is thought that the site would follow the cessation of other extraction at Tatchell's rather than operating in parallel to it. The site has therefore been given a 'Less Significant Adverse Impact' rating. Should the site intensify movements to Tatchell's any Transport Statement should consider vehicle routing and any impact on the A351 to the east which experiences high levels of congestion. Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network. 	<ul style="list-style-type: none"> Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	-	0	<ul style="list-style-type: none"> The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy. 	<ul style="list-style-type: none"> Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	-	0	<p>Impact on Sensitive Human Receptors</p> <ul style="list-style-type: none"> Residences within 300m. Development would likely require appropriate mitigation (such as visual and noise attenuation bunding, standoffs) to limit impacts. 	<ul style="list-style-type: none"> Provision of appropriate mitigation, following assessment of likely impacts.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	-	0	Impact on Existing Settlements <ul style="list-style-type: none"> Wareham is the closest settlement, to the east of the site and approximately 450m at its closest. Screening (visual and noise attenuation bunding) would significantly limit the impact of the site working. 	<ul style="list-style-type: none"> Restoration to improve landscape of site where possible; and to seek to facilitate public access. Screening, bunding, standoffs will mitigate impacts.
	0	0	Impact on Airport Safety <ul style="list-style-type: none"> Site is approximately 22 km from airport and proposed for dry working and restoration. No impacts expected 	<ul style="list-style-type: none"> No action required.
18. To enable safe access to countryside and open spaces.	0	+	Impact on Recreational Land <ul style="list-style-type: none"> Site is currently agricultural land and does not contain any recreational use, either formal or informal. No impacts expected 	<ul style="list-style-type: none"> No action required prior to working. Possible impacts to be assessed, with appropriate mitigation identified. Restoration has potential to improve public access in the area, possibly through allowing the footpath to be moved to the other side of the hedge, out of the road.
	-	+	Impact on Public Rights of Way <ul style="list-style-type: none"> Footpath runs adjacent to the northern edge of the site. It runs in the road, hedge offers some screening. Further mitigation may be required. 	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
<ul style="list-style-type: none"> • Watercourses • Ponds/lakes, including wet habitats • Groundwater 	<ul style="list-style-type: none"> • The River Basin Management Plan South West River Basin District identifies the Piddle as being of 'Poor' environmental quality. Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies. • Impacts on or removal of surface water features. 	<ul style="list-style-type: none"> • Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Piddle or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. • Relocation of surface water features, provided this is feasible. 	<ul style="list-style-type: none"> • Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating surface water features and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is relatively small and lies entirely within Flood Zone 1.

The site falls entirely within Flood Zone 1 (low risk – fluvial flooding) according to the Environment Agency's relevant flood modelling, and is not shown to be at any significant risk of surface water flooding by relevant mapping, other than very isolated ponding during severe rainfall events (1:100/1000yr).

Surface water runoff is likely to gravitate to the south and floodplain / tributaries of the River Piddle Main River. In accordance with the recommendations of the NPPF, a site specific strategy of surface water management should be requested to demonstrate that runoff rates are not to increase, and that no off site worsening or increased risk of flooding will result.

Sand and gravel extraction is water compatible, so suitable in flood risk terms for allocation in Draft Mineral Sites Plan provided the appropriate hydrological assessment is carried out and a Flood Risk Assessment prepared and land within Flood Risk Zone 1 is available for location of processing facilities and stockpiles.

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Cumulative Impacts

There is other mineral working in the vicinity, both existing and proposed as well as waste management activities. The proposed site is an extension to existing mineral working/waste disposal. **It is proposed to add an additional development guideline to highlight the potential for cumulative impacts from the developed of sites in close proximity.**

The proposal is within 5Km (by road) of a site allocated in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy CEN) for development of 200 dwellings and community facilities, off Worgret Road, Wareham. Traffic arising from the new residential development will also add to general traffic levels in / around Wareham.

As Tatchell's is not currently operational, developing this site would result in new traffic generation and cumulative impacts. It is expected that these can be satisfactorily mitigated.

If Philliol's Farm is operational simultaneously with Tatchell's, and particularly if both sites were using the same processing facilities at Tatchell's, this could lead to transport impacts, including cumulative impacts. Is this situation were likely to arise, careful assessment would be needed to demonstrate that the road could carry the potential traffic loading. The site at Trigon Hill (BC04) would also have to be taken into consideration, along with any new development in and around Wareham. **It is proposed to remove the allocation of Philliols Farm from the Mineral Sites Plan. This should reduce the cumulative impacts of mineral extraction and transportation of minerals.**

NB: Further work has been undertaken on cumulative impacts for all sites. This information is presented in a separate document that should be read alongside this report. It indicates that there is potential for in-combination effects in relation to air/dust; Greenhouse Gases; landscape and amenity. There is also potential for inter-relationships between amenity and landscape.

In most cases impacts would be expected in the short to medium term. In the longer term, as restoration proceeds, impacts are expected to reduce. The MPA is satisfied that identified impacts can be satisfactorily addressed by DGs and existing/proposed policy.

Viability

As an extension to an existing operational site, even if not operational, viability is not considered to be an issue. The necessary access exists, and processing facilities be brought in. It is expected that markets exist, provided the appropriate sand quality exists. The mineral has been assessed and proven. The site is considered viable, in terms of inclusion in the Draft Plan.

Summary

Key impacts and benefits are expected to include, but are not necessarily limited to, the following.

Potential Benefits	Potential Impacts
<ul style="list-style-type: none"> • Provision of aggregates required for maintenance and construction of the built environment, with accompanying benefits to the economy. The additional reserve estimated on this site would provide a benefit, albeit limited. • Provision of employment, to the benefit of local economy. • Improved public access may be possible as a part of site restoration. This could lead to reduced visitor pressure on designated heathland sites in the vicinity. • Nature conservation benefits may be achieved as part of restoration. • Restoration has the potential to improve public access, moving the existing footpath adjacent to the site out of the road and onto the site. 	<ul style="list-style-type: none"> • Possible impacts on archaeology – to be fully assessed and not expected to restrict development. All necessary mitigation to be implemented. • The site will be accessed by road. A transport assessment will be required. • Cumulative traffic impacts, with AS15 Tatchell’s and BC04 Trigon Hill, are possible and must be assessed. • Site is agricultural land, and development will have an impact on this use. It is expected that the site can be restored to an agricultural use.

Overall Recommendation:

This is a small and relatively uncontentious site with limited impacts, which are expected to be capable of mitigation.

Particular care must be taken regarding potential cumulative traffic impacts, taking into consideration whether Philliol’s Farm and Trigon Hill might be in operation. **However, it is proposed to remove the allocation of Philliols Farm from the Mineral Sites Plan. This should reduce the cumulative impacts of mineral extraction and transportation of minerals.**

Further assessment will be required to gain a better understanding of what the impacts might be and how best to mitigate. Should this site ultimately be developed, it is expected that detailed assessment of impacts and required mitigation will be covered through the required Environmental Impact Assessment.

On balance, it appears reasonable on the basis of evidence available that the impacts identified in this sustainability appraisal are capable of satisfactory mitigation and the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Updated Recommendation (February 2019)

The removal of the Philliols Farm allocation from the Mineral Sites Plan should reduce the potential for cumulative impacts of working this site.

There are not considered to be any significant additional impacts from the increased reserved estimated at this site.

The site therefore remains appropriate for allocation in the Bournemouth, Dorset and Poole Mineral Sites Plan.

Aggregates: AS19 Woodsford NE Extension (February 2019)

Site Name/Location: AS19 Woodsford NE Extension		Nominee/Agent: Woodsford Farms / D K Symes	
Mineral Type: Sand and gravel		Local Authority: West Dorset District Council	
Site Area: approximately 90 ha	Production: 200,000 – 250,000 tpa;	Reserve: approximately 2.1 mt	

Impact Assessment Scoring

-	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain
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Timescales for effects:

P/W: Preparation and Working

R/A: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	N/A	N/A	<ul style="list-style-type: none"> This Objective is not relevant to this site nomination 	<ul style="list-style-type: none"> N/A
2. To maintain, conserve and enhance biodiversity	++	+	<p>European/International Designations</p> <ul style="list-style-type: none"> The permanent change of at least part of the site area from intensive agriculture to mineral extraction restored to extensive grassland and water bodies would be likely to result in a reduction in nitrate levels in receiving waters of the R. Frome, groundwater and Poole Harbour (SPA and Ramsar). If this can be secured there would be strategic nature conservation gain. In addition, reduction in intensive agricultural management of the fields between the proposed extraction area and the R. Frome would be an additional significant gain, preventing more direct runoff of fertiliser into the river and onward to Poole Harbour. These benefits will be realised from the time that the fields are taken out of agricultural production. 	<ul style="list-style-type: none"> Minimise the area returned to intensive agriculture after working and maintain an area of land between the proposed site and the Frome as non-agricultural use land. A development guideline is proposed through a modification to ensure opportunities for wetland restoration are explored.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0	Annex 1 Bird Species <ul style="list-style-type: none"> No impacts expected. 	<ul style="list-style-type: none"> No action required.
	++	+	National Designations <ul style="list-style-type: none"> Comments made under European/International designations (above) apply to national designations as well 	<ul style="list-style-type: none"> Minimise the area returned to intensive agriculture after working and maintain the fields between site and Frome as non-agricultural use land.
	-	0	Protected species <ul style="list-style-type: none"> Water voles and other protected species (including otter) may be present in watercourses contained within the proposed site. If they are present, mitigation should not be difficult. 	<ul style="list-style-type: none"> Ecological surveys required, with appropriate mitigation identified.
	0	0	Local recognitions/designations, including ancient woodland and veteran trees <ul style="list-style-type: none"> No impacts expected 	<ul style="list-style-type: none"> No action required.
3. To maintain, conserve and enhance geodiversity.	+	0	<ul style="list-style-type: none"> Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration. 	<ul style="list-style-type: none"> Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a	++	+	Groundwater <ul style="list-style-type: none"> Site is within 250 m of licensed water supplies. Overlies secondary aquifer, but does not affect any Source Protection Zone. Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated. Proposal will reduce nitrate contamination of groundwater from agricultural fertiliser. 	<ul style="list-style-type: none"> Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. <p>Text is proposed to clarify that a hydrogeological assessment will include potential impacts on fisheries in the Frome.</p>

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
sustainable way.	+ +	+	<p>Surface Water</p> <ul style="list-style-type: none"> River Frome runs north of the site boundary, and there are many other watercourses within and near the site. Restoration proposals should incorporate gain of wetland features which will contribute to the aspirations of the England Biodiversity Strategy. Ensure no impacts from this development and no increased sedimentation. Proposal will reduce nitrate contamination of surface water from agricultural fertiliser. 	<ul style="list-style-type: none"> Where necessary mitigating measures should be installed to maintain groundwater levels. Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality – see first bullet point. Any fuel on site should be properly stored to avoid contamination in case of spillage. Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
5. To reduce flood risk and improve flood management.	0	0	<p>Flooding/Coastal Stability</p> <ul style="list-style-type: none"> Small area of northern part of the site is within FRZ 2/3, most of site within FRZ 1. Site is proposed for sand and gravel extraction, which is permitted within the functional floodplain. Processing plant far removed and on FRZ 1. 	<ul style="list-style-type: none"> Flood Risk Assessment (FRA) will be required. All necessary mitigation to be implemented.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and	- / --	0	<p>Archaeology</p> <ul style="list-style-type: none"> Significant prehistoric and Roman material has been found on the western part of the site. Possible medieval/prehistoric settlement in western part of site. Frome Bridge, which is protected as a Scheduled Monument, lies to the north-west. There is potential for surviving earthworks and structures associated with the management of watermeadow systems. 	<ul style="list-style-type: none"> Full archaeological survey of the area required to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
gardens and other locally distinctive features and their settings).	?		<ul style="list-style-type: none"> The presence (or not) of features associated with the watermeadow systems needs to be determined, then the impact on them, and on the setting of Frome Bridge and other historic features and on below-ground archaeology needs to be assessed and evaluated before an informed planning decision could be made Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from Very Significant to No Significant impact. 	<ul style="list-style-type: none"> All necessary mitigation to be implemented. Adequate provision to be made for preservation, excavation or recording, as appropriate. Further consideration to be given to restoration proposals, in terms of historic landscapes. A modification is proposed to ensure that a Heritage and Setting Assessment is prepared. Furthermore, a series of mitigation measures are set out.
	?	0	<p>Historic Landscapes</p> <ul style="list-style-type: none"> The site lies in the broad lower section of the valley of the river Frome. Historically some of the land here was heathland, other parts being wooded and under arable cultivation. On the flat lands close to the river itself, extensive systems of watermeadows were constructed from the 18th century onwards. The impact on the watermeadow systems in particular needs to be assessed and evaluated, as noted above. Only when this has happened would the impact on the historic landscape be understood. The Hardy associations of this landscape are discussed below. 	
	0	0	<p>Historic Buildings</p> <ul style="list-style-type: none"> A cluster of listed buildings, all Grade II, are located to the west of the proposed site. However it is considered that the field located between the historic buildings and the site will create a buffer sufficient that there will be no impact from site to the buildings. The restoration proposals are sufficient to conform with the literary associations of this part of Dorset, in particular the Valley of the Dairies character created by Thomas Hardy. If the management of the water meadow land alongside the river can be appropriately managed and enhanced this will enhance the historic environment of this proposal. 	<ul style="list-style-type: none"> A full assessment required to be carried out, with appropriate mitigation implemented as required.
7. To maintain, conserve and	-	0	Landscape Capacity	<ul style="list-style-type: none"> Assessment of potential visual impacts required

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
enhance the landscape, including townscape, seascape and the coast.			<ul style="list-style-type: none"> The landscape is open and agricultural in character and development has the potential to impact on the openness of this landscape. Existing and new hedgerows and blocks of woodland provide an element of natural screening which would assist in the mitigation of any quarry development. 	<p>and all appropriate mitigation to be included.</p> <ul style="list-style-type: none"> Restoration could include increasing public access/informal recreation and including appropriate nature conservation interests. Advance planting to be carried out to prepare site for working.
	0	0	<p>Designated Landscapes</p> <ul style="list-style-type: none"> No significant impact expected. 	<ul style="list-style-type: none"> No action required.
8. To protect and improve air quality and reduce the impacts of noise.	0	0	<ul style="list-style-type: none"> Impacts on air quality expected to be negligible. No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site. 	<ul style="list-style-type: none"> Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	-	0	<ul style="list-style-type: none"> Site contains/comprises very good quality agricultural land. Working the site will have impacts on this soil. Restoration will return the land to original ground levels, and will restore the quality of the land. 	<ul style="list-style-type: none"> Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working. Restoration to include high quality agricultural land.
10. To conserve and safeguard mineral resources.	++	0	<ul style="list-style-type: none"> The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole. 	<ul style="list-style-type: none"> No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
11. To promote the use of alternative materials.	-	0	<ul style="list-style-type: none"> This proposal does not at present promote the use of alternative materials. It is possible that treated inert waste will be used in restoration of the site, but this will not directly promote the use of alternative materials. 	<ul style="list-style-type: none"> No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	<ul style="list-style-type: none"> Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective. 	<ul style="list-style-type: none"> Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	<ul style="list-style-type: none"> This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. However given the expected size of the reserve this is likely to be a limited benefit. There is potential for negative economic impacts, such as dust, noise and increased traffic, which could affect other businesses in the vicinity or even further away. Restoration to agriculture with some element of public access will, if achieved, offer some economic benefits through both the agriculture and the recreational attraction and use in the wider area (i.e. riding, walking). 	<ul style="list-style-type: none"> Careful assessment of potential negative impacts required, with appropriate mitigation – this could include buffering/screening and holding back quarry traffic during peak traffic times. Further assessment required to form a view as to what the most appropriate restoration could be.
14. To adapt to and mitigate the impacts of climate change.	-	0	<ul style="list-style-type: none"> Developing the site as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. 	<ul style="list-style-type: none"> Use energy efficient plant and machinery. Implement restoration which provides appropriate habitats to help to

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<ul style="list-style-type: none"> The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small. 	increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	0	0	<ul style="list-style-type: none"> This is a large site of approximately 90 hectares located to the north of the C33 road through Woodsford. While no estimation of vehicular trips were given, the estimated annual output of 200,000 to 250,000 tonnes could reasonably generate 100 trips or more per day. The surrounding highway network is narrow and torturous in nature with few passing areas and limited forward visibility. There would be likely to be a strong highway objection to this scheme if it proposed to use any of these local roads. However, mineral extracted will be conveyed to the existing Hills' site, with access immediately west of the level crossing on the D21322. This site would require a full Transport Assessment were it to be submitted as a planning application. Any TA should initially be scoped with the Transport Development Management Team. It would also need to consider the Highways Agency concerns with regards to movements to the A35T. Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network. 	<ul style="list-style-type: none"> Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network. Mineral to be conveyed by internal haul routes or conveyors to existing Hills plant site for processing and export. An additional development guideline has been included to clarify this issue.
16. To support and encourage the use of sustainable transport modes,	-	0	<ul style="list-style-type: none"> The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact during development and working. However, the site will utilise internal conveyors to transport mineral for processing. 	<ul style="list-style-type: none"> Mitigate impacts where identified and appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
imposing no unmitigated negative impacts on them.	+		<ul style="list-style-type: none"> As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy. 	
17. To sustain the health and quality of life of the population	-	0	<p>Impact on Sensitive Human Receptors</p> <ul style="list-style-type: none"> Residences and businesses within 250-500m. The site is large enough that it should be possible to screen these residences satisfactorily. Development would likely require appropriate mitigation (such as visual and noise attenuation bunding, standoffs) to limit impacts. 	<ul style="list-style-type: none"> Provision of appropriate mitigation, following assessment of likely impacts. Restoration to improve landscape of site where possible; and to seek to increase public access. Screening, bunding, standoffs will mitigate impacts to some extent. Cumulative impacts on surroundings of working along with the adjacent Hurst Farm proposed site to be taken into consideration and mitigated against. A series of additional development guidelines are proposed to reflect the potential for cumulative impacts and provide mitigation to ensure impacts are reduced.
	0	0	<p>Impact on Existing Settlements</p> <ul style="list-style-type: none"> Crossways is approximately 1.3km to the south and Higher Woodsford some 900m. East Woodsford is within 500m to the east, Tincton some 700m to the north. Site is well screened by existing hedges/trees. The site is large enough that where necessary it should be possible to screen any negative impacts satisfactorily, using mitigation such as visual and noise attenuation bunds. Site is relatively isolated and unlikely to impact any of these sites visually or through increased traffic. 	
	0	0	<p>Impact on Airport Safety</p> <ul style="list-style-type: none"> The site is some 35 km from the airport and not considered to be a threat. 	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
18. To enable safe access to countryside and open spaces.	0	0	Impact on Recreational Land <ul style="list-style-type: none"> Site is agricultural land – it does not include any formal/informal recreational land, apart from footpath crossing it. Restoration could include some aspect of improved public access. 	<ul style="list-style-type: none"> No action required for working. Consider including some aspect of public access as part of restoration.
		+		
	-	0	Impact on Public Rights of Way <ul style="list-style-type: none"> Footpath crosses the site and will need temporary/permanent diversion. Opportunities for increased public access following restoration, to be considered. 	<ul style="list-style-type: none"> Assessment of impacts, with appropriate mitigation identified. Restoration to improve public access in the area.
		+		

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
<ul style="list-style-type: none"> Watercourses Ponds/lakes, including wet habitats Groundwater 	<ul style="list-style-type: none"> The River Basin Management Plan South West River Basin District identifies the Frome as being of 'Poor' environmental quality in this area. Potential for contamination from runoff from site. Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. Contamination of water supplies or reduction in amount of water available for licenses supplies. 	<ul style="list-style-type: none"> Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Frome or groundwater unless any silt has first been removed. Fuel stored on site to be appropriately banded and sealed to prevent any spillage from entering ground or surface waters. On-going monitoring during development and working of the site. Relocation of surface water features, 	<ul style="list-style-type: none"> Full hydrogeological risk assessment will be required as part of a planning application. Flood Risk Assessment Water Framework Assessment Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. Assessment of the feasibility of relocating or re-creating surface water features and associated habitats and species. Land Drainage Consent to be obtained from Dorset County Council if works

- Impacts on or removal of surface water features.

provided this is feasible.

- Need to consider compliance to the Restoration Plan for the River Frome and its floodplain.

may affect flow of an ordinary watercourse.

Flood Risk Commentary

The site falls entirely within Flood Zone 1 (low risk – fluvial flooding) according to the Environment Agency’s relevant flood modelling, but is in close proximity to the floodplain of the Main River Frome, and associated extent of Flood Zones 2 & 3 (medium & high risk) immediately to the north.

This proximity is likely to maintain / elevate ground water levels throughout the site. In addition, there is some theoretical risk of surface water flooding, shown by relevant mapping which indicates isolated ponding during severe rainfall events (1:100/1000yr). A site specific strategy of surface water management should be requested to ensure that the proposal does not increase rates of runoff or generate off site worsening. As such the proposed activity should comply with the recommendations of the NPPF. Prior Land Drainage

Consent may be required from DCC as relevant LLFA, for any works offering an obstruction to flow within a channel or ditch with the status of Ordinary Watercourse.

Sand and gravel extraction is water compatible, so suitable in flood risk terms for allocation in Draft Mineral Sites Plan provided the appropriate hydrological assessment is carried out and a Flood Risk Assessment prepared and land within Flood Risk Zone 1 is available for location of processing facilities and stockpiles.

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Cumulative Impacts

The site is an extension to a current aggregates quarry, in an area where there is other aggregate working both existing and proposed. As an extension, no intensification leading to cumulative impacts for traffic is expected.

There could be cumulative visual/landscape impacts, depending on how much of previous working of other parts of the site have been effectively restored when the North East Extension is applied for. This should be addressed at the stage of the planning application. Full visual impact assessment will be required, to identify impacts and mitigation.

The proposal is within 5Km of a site to the south of Crossways village allocated in the Pre -Submission draft West Dorset, Weymouth and Portland Local Plan (June 2012) as amended by Proposed Modifications (June 2013), (Policy CRS1) for residential (500 dwellings) and employment (3.5Ha) development. Traffic arising from this new development will add to general traffic levels on the B3390.

This site is immediately adjacent to (west of) another sand and gravel site nomination, AS25 Hurst Farm, Moreton. In terms of access there are unlikely to be cumulative impacts as the two sites would be accessed via different roads. Hurst Farm would add some additional traffic onto the B3390.

The main cumulative impact would occur if this site proposal was to be worked simultaneously with the proposed AS26 Hurst Farm immediately to the east. This could lead to disturbance to properties on the north side of the Frome. The working of these sites will be phased to ensure that they do not work in adjacent areas simultaneously. The northern boundary of the site has been pulled back to provide a greater buffer. **A series of additional development guidelines are proposed to reflect the potential for cumulative impacts and provide mitigation to ensure impacts are reduced.**

The existing Warmwell Quarry, to the west of Crossways, has finished production, which has led to a reduction in lorry traffic on local roads.

NB: Further work has been undertaken on cumulative impacts for all sites. This information is presented in a separate document that should be read alongside this report and indicates that there is potential for in-combination effects in relation to biodiversity; human health; soil; water; air/dust; climate/GHGs; cultural heritage (archaeology/Listed Buildings); landscape and amenity. This could occur in the short to medium term and also has beneficial effects through reduction in nitrates entering the water and being transferred to Poole Harbour.

In most cases impacts would be expected in the short to medium term. In the longer term, as restoration proceeds, impacts are expected to reduce. There are no permanent changes expected that will affect amenity. Proposed modification to the DGs requires cumulative impacts to be taken into consideration. The MPA is satisfied that identified impacts can be satisfactorily addressed by DGs and existing/proposed policy.

There is potential for in-combination effects in relation to landscape, amenity and heritage. This could occur in the short to medium term in respect of landscape which contributes to the setting of heritage assets and where the amenity of residents and visitors could be affected by visual/noise impacts in this open landscape. In the long term restoration ensures that the open landscape will be maintained. There are no permanent changes expected that will affect amenity.

Viability

As an extension to an existing operational site, viability is accepted. The site will use existing processing facilities, road access and serve existing markets, and therefore these do not have to be provided. Mineral has been proven. The site is considered viable, for allocation in the Plan.

Summary

Potential Benefits	Potential Impacts
<ul style="list-style-type: none"> • Provision of aggregates required for maintenance and construction of the built environment. • Restoration could include some increased and improved public access. • Working the site will provide hydrology benefits to nature conservation, ground and surface water and European and national nature conservation designations, through removing then limiting the flow of nitrates into ground and surface waters. • Restoration could include nature conservation benefits through management of the northern part of the site as wetland and reducing the land under intensive agriculture. 	<ul style="list-style-type: none"> • There are expected to be heritage/archaeological impacts but it is expected that these impacts can be addressed. • Possible impacts on the carrying capacity of the landscape, advanced planting should address this issue. • The land is good quality agricultural land. Working the site for minerals will impact on this use and on the soil on the site. However the soils can be adequately protected and together with the agricultural use, restored or partly restored after working. • Although relatively remote and mostly visually screened, working this site could have visual and noise impacts for properties/businesses to the north of the site, on the other side of the river. All appropriate mitigation to be put in place to minimise such impacts. The potential for cumulative impacts with other mineral workings in proposed to be addressed through additional development guidelines. • A relatively small section of footpath crosses the western part of the site – this can be either temporarily or permanently diverted or screened and avoided. • As an extension, site is not expected to cause intensification of impacts but will increase the time

period that impacts are experienced e.g. transport impacts.

Overall Recommendation:

This site is an extension of an existing quarry. No intensification of working is expected and any likely impacts are expected to be capable of mitigation. Site access and mineral processing will be via the existing operation. The proposal offers the strong benefit of reducing the flow of agricultural fertilisers into the groundwater, the Frome and ultimately into Poole Harbour. Depending on the final restoration of the site, nitrate flow could be reduced permanently.

Although well screened, it is possible that when the northern part of this site is worked there could be impacts on the amenity of residences/businesses across the river. To avoid this, mitigation will be required, including pulling the northern boundary of the site back. In addition, phasing of the working of this site and of the proposed site to the east, AS26 Hurst Farm, will be arranged in such a way that the northern sections of the two sites are not being worked adjacently and simultaneously.

The issue of cumulative impact must be carefully addressed. The proposed site is immediately adjacent to the proposed Hurst Farm site and adjacent areas of these two sites should not be worked simultaneously, particularly in the northern parts of each site, to minimise impacts on residences and businesses across the river.

Pulling the northern boundary back and leaving an area of unworked land to be managed as wetland will both assist in reducing nitrate flows to the river and reducing impacts on surrounding receptors.

The potential for cumulative impacts with other mineral workings in proposed to be addressed through a series of detailed additional development guidelines proposed as modifications to the Plan.

On balance, it appears reasonable on the basis of evidence available that the impacts identified in this sustainability appraisal are capable of satisfactory mitigation and the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Update Recommendation (February 2019)

A series of development guidelines are proposed as modifications to the Mineral Sites Plan. These modifications provide additional details, in particular, relating to cumulative impacts that overall will reduce the impacts of working. The site therefore remains appropriate for allocation in the Bournemouth, Dorset and Poole Mineral Sites Plan.

Aggregates: AS25 Station Road, Moreton (February 2019)

Site Name/Location: AS25 Station Road, Moreton Mineral Type: Sand and gravel		Nominee/Agent: Moreton Estate / Halletec Environmental Local Authority: Purbeck District Council	
Site Area: approximately 60 ha	Production: approximately 200,000 tpa	Reserve: approximately 3.1 million tonnes	

Impact Assessment Scoring

-	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain
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Timescales for effects:

P/W: Preparation and Working

R/A: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	N/A	N/A	<ul style="list-style-type: none"> This Objective is not relevant to this site nomination 	<ul style="list-style-type: none"> N/A
2. To maintain, conserve and enhance biodiversity	+	+	<p>European/International Designations</p> <ul style="list-style-type: none"> No impacts expected Site working and restoration has the potential to reduce the flow of nitrates into the groundwater, the Frome and ultimately Poole Harbour 	<ul style="list-style-type: none"> No action required for working. Consider restoration that will include some areas for nature conservation and not to be used for agriculture.
	0	0	<p>Annex 1 Bird Species</p> <ul style="list-style-type: none"> No impacts expected. 	<ul style="list-style-type: none"> No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	+	+	National Designations <ul style="list-style-type: none"> No impacts expected during working. Site working and restoration has the potential to reduce flow of nitrates into the groundwater, the Frome and ultimately Poole Harbour 	<ul style="list-style-type: none"> No action required for working. Consider restoration that will include some areas for nature conservation and not to be used for agriculture.
	0	0	Protected species <ul style="list-style-type: none"> No impacts expected 	<ul style="list-style-type: none"> No action required.
	0	0	Local recognitions/designations, including ancient woodland and veteran trees <ul style="list-style-type: none"> No impacts expected 	<ul style="list-style-type: none"> No action required.
3. To maintain, conserve and enhance geodiversity.	+	0	<ul style="list-style-type: none"> The extraction of tertiary deposits and created exposures are of on-going interest to Tertiary and Quaternary geo-scientists as potential, if not active, research sites. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration. 	<ul style="list-style-type: none"> Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	-	0	Groundwater <ul style="list-style-type: none"> Licensed abstraction within 500 m. Does not affect any Source Protection Zones. Overlies Secondary aquifer. Proposals would need to be supported with a hydrogeological risk assessment. Site working and restoration has the potential to reduce flow of nitrates into the groundwater, the Frome and ultimately Poole Harbour 	<ul style="list-style-type: none"> Hydrological assessment required at planning application stage to determine possible impacts on ground and surface waters, with appropriate mitigation to be implemented. Where necessary mitigating measures should be installed to maintain groundwater levels. Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality.
+				

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	-	0	<p>Surface Water</p> <ul style="list-style-type: none"> The proposed site shows watercourses running within it. It will need to be proved that the extraction proposals will not have an adverse effect on the natural hydrology and water quality at the site allocation phase. Applicants or developers should be aware of their responsibilities to ensure that the operations do not interfere with riparian owners' common law rights to receive water undiminished in quantity or quality. 	<ul style="list-style-type: none"> An additional development guideline is proposed to ensure that development does not cause a decrease in rate or volume of flow or deterioration in water quality. Any fuel on site should be properly stored to avoid contamination in case of spillage. Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse. Consider restoration that will include some areas for nature conservation and not to be used for agriculture.
5. To reduce flood risk and improve flood management.	0	0	<p>Flooding/Coastal Stability</p> <ul style="list-style-type: none"> No Environment Agency objection with regard to flood risk issues for this site. Site is entirely within Flood Risk Zone 1. As the site is greater than 1 hectare, a site specific Flood Risk Assessment (FRA) will be required in support of any future planning application. 	<ul style="list-style-type: none"> Flood Risk Assessment (FRA) will be required. All necessary mitigation to be implemented.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and	?	0	<p>Archaeology</p> <ul style="list-style-type: none"> The size of the site and the presence of known historic features in the vicinity (notably those in and around the village of Moreton) indicate that the site has a high archaeological potential. The potential impact on below-ground archaeological remains needs to be assessed and evaluated before an informed planning decision can be made. Only when these have been undertaken would the archaeological impact be understood – at 	<ul style="list-style-type: none"> Archaeological survey of the area will be required to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
gardens and other locally distinctive features and their settings).			present it could be anywhere from Very Significant Impact to No Significant/Negligible Impact.	<ul style="list-style-type: none"> All necessary mitigation to be implemented. Adequate provision to be made for preservation, excavation or recording, as appropriate. Assessment to include consideration of current land use and field pattern. Further consideration to be given to restoration proposals, in terms of historic landscapes. A modification is proposed to ensure that a Heritage and setting Assessment is prepared. Furthermore, a series of mitigation measures are set out.
		0	<p>Historic Landscapes</p> <ul style="list-style-type: none"> The site lies in the broad lower section of the valley of the River Frome. Historically some of the land here was heathland, other parts being wooded and under arable cultivation. Assessment of the age and importance of the present land use and field pattern would be needed for an informed planning decision to be made. Impact could be anywhere between Significant Adverse and No Significant /Negligible, depending on the results of this assessment and the development's working and restoration methods. 	
	?	+		
	--		<p>Historic Buildings</p> <ul style="list-style-type: none"> Station Road is lined on both sides with an informal avenue of trees and shrubs. The two closest listed buildings are sited to face along the road rather than across it at the site. The avenue of trees will limit impacts on these buildings and their settings. The presence of these heritage assets constitutes a constraint that has been given considerable weight and importance. 	<ul style="list-style-type: none"> Full heritage assessment required to be carried out, with appropriate mitigation identified and implemented as required. If the impacts cannot be mitigated satisfactorily the site will not be developed. A modification is proposed to ensure that a Heritage and setting Assessment is prepared. Furthermore, a series of mitigation measures are set out.
	0	0		

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	-	0	<p>Landscape Capacity</p> <ul style="list-style-type: none"> Less significant landscape impact. Landscape capacity to accommodate the site is medium. The main impacts for the site will be from the B3390, Station Rd and Redbridge Rd as there are no rights of way through or near the site. Development will create a medium adverse impact on the openness of the river valley pasture landscape and a significant adverse impact on the pattern of field boundary hedgerows/trees and copses. 	<ul style="list-style-type: none"> Assessment of potential visual impacts required and all appropriate mitigation to be included. Restoration could include increasing public access/informal recreation and including appropriate nature conservation interests.
		+		
8. To protect and improve air quality and reduce the impacts of noise.	0	0	<ul style="list-style-type: none"> Impacts on air quality expected to be negligible. No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site. 	<ul style="list-style-type: none"> Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	-	0	<ul style="list-style-type: none"> Site contains/comprises good to moderate quality agricultural land. Working the site will have impacts on this soil. Soils will be stripped and removed to be stored and. It is expected that restoration will return at least part of the land to original ground levels, and will restore the quality of the land. 	<ul style="list-style-type: none"> Soil to be properly stripped and stored prior to working; protected during working; and returned as part of restoration. Restoration to include high quality agricultural land.
10. To conserve and safeguard mineral resources.	++	0	<ul style="list-style-type: none"> The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole. 	<ul style="list-style-type: none"> No specific action required. Site development to take into consideration relevant impacts and mitigate where appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
11. To promote the use of alternative materials.	0	0	<ul style="list-style-type: none"> This proposal does not at present promote the use of alternative materials. It is possible that treated inert waste will be used in restoration of the site, but this will not directly promote the use of alternative materials. 	<ul style="list-style-type: none"> No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	<ul style="list-style-type: none"> Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective. 	<ul style="list-style-type: none"> Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	<ul style="list-style-type: none"> This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. Restoration to agriculture with some element of public access will, if achieved, offer some economic benefits through both the agriculture and the recreational attraction and use in the wider area (i.e. riding, walking). There is potential for negative economic impacts, such as dust, noise and increased traffic, which could affect other businesses in the vicinity or even further away. 	<ul style="list-style-type: none"> Careful assessment of potential negative impacts required, with appropriate mitigation – this could include buffering/screening and holding back quarry traffic during peak traffic times. Further assessment required to form a view as to what the most appropriate restoration could be.
14. To adapt to and mitigate the impacts of climate change.	-	0	<ul style="list-style-type: none"> Developing the site as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate 	<ul style="list-style-type: none"> Use energy efficient plant and machinery. Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<p>change impacts and their possible mitigation for any proposed minerals development.</p> <ul style="list-style-type: none"> The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small. 	
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	-	0	<ul style="list-style-type: none"> This site has an estimated 200,000 tonnes annual output and approximately 80 vehicle trips per day (40 in and 40 out). Access to the site is proposed from the B3390. This is a straight road at this point with hedgerows on either side and some large trees along the roadside edge. It should be possible to find a suitable access point along the site frontage, avoiding significant trees. Visibility splays suitable for 60 mph will be needed for this access and some hedgerow loss or relocation may be necessary to achieve this. Access should not be via the C33, Station Road that runs along the northern boundary of the site and forms part of National Cycle Network route 2 (NCN2). This site would require a full Transport Assessment were it to be submitted as a planning application. Any TA should initially be scoped with the Transport Development Management Team. It may also need to consider Highways Agency concerns with regards to movements to the A35T. Due to the direct access from this site onto the B3390, and the reasonable possibility of an acceptable access provision, this site has been given a D (No Significant/Negligible Impact) rating. Policies DM1 and DM 8 of the 2014 Minerals Plan actively address this issue of minimising impacts on the transportation network. 	<ul style="list-style-type: none"> Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	-	0	<ul style="list-style-type: none"> The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact during development and working. As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy. 	<ul style="list-style-type: none"> Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	-	0	<p>Impact on Sensitive Human Receptors</p> <ul style="list-style-type: none"> Residential properties adjacent to site and in vicinity of site. Site is large enough to include appropriate mitigation to adequately screen surrounding properties from visual/noise impacts. Impact will be somewhere between 'Significant' and 'Less Significant', given size of site and levels of screening existing and to be created. Development is likely to require appropriate mitigation (such as visual and noise attenuation bunding, standoffs) to limit impacts. 	<ul style="list-style-type: none"> Provision of appropriate mitigation, following assessment of likely impacts. Restoration to improve landscape of site where possible; and to seek to increase public access. Screening, bunding, standoffs will mitigate impacts to some extent. A modification is proposed to include an additional development consideration to require a safe pedestrian access facilitating non-car access between Moreton Station and Moreton village.
		+	<p>Impact on Existing Settlements</p> <ul style="list-style-type: none"> Moreton village itself is adjacent to the eastern end of the proposed site. Again, the size of the site and the level of existing tree screening should make it possible to effectively screen the workings from the village. No quarry traffic would enter the village. Crossways is approximately 1 km away but completely screened. Villages along the B3390 may be affected by site traffic, depending on where the site is accessed. Transport issues/impacts are addressed separately. Site is well screened by existing hedges/trees. The site is large enough that where necessary it should be possible to screen any negative impacts satisfactorily, using mitigation such as visual and noise attenuation bunds. 	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<ul style="list-style-type: none"> Site is relatively isolated and unlikely to impact any of these sites visually or through increased traffic. Impact will be somewhere between 'Significant' and 'Less Significant', given size of site and levels of screening existing and to be created. 	
	0	0	<p>Impact on Airport Safety</p> <ul style="list-style-type: none"> The site is some 35 km from the airport and not considered to be a threat. 	<ul style="list-style-type: none"> No action required.
18. To enable safe access to countryside and open spaces.	0	+/?	<p>Impact on Recreational Land</p> <ul style="list-style-type: none"> Site is agricultural land and does not appear to include any formal or informal recreational facilities. Restoration could include some element of public access. 	<ul style="list-style-type: none"> No action required for working. Consider including some aspect of public access as part of restoration.
	0	+/?	<p>Impact on Public Rights of Way</p> <ul style="list-style-type: none"> Site is agricultural land and there are no public rights of way on, adjacent to or visible from the land. Opportunities for increased public access following restoration to be considered. 	<ul style="list-style-type: none"> Consideration to be given to opportunities for improving public access in the area through restoration.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
<ul style="list-style-type: none"> • Watercourses • Ponds/lakes, including wet habitats • Groundwater 	<ul style="list-style-type: none"> • The River Basin Management Plan South West River Basin District identifies the Frome as being of 'Poor' environmental quality in this area. Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies. • Impacts on or removal of surface water features. 	<ul style="list-style-type: none"> • Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Frome or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. • Relocation of surface water features, provided this is feasible. • Need to consider compliance to the Restoration Plan for the River Frome and its floodplain. 	<ul style="list-style-type: none"> • Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating surface water features and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is entirely within Flood Zone 1.

Some risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Sand and gravel extraction is water compatible, so suitable in flood risk terms for allocation in Draft Mineral Sites Plan provided the appropriate hydrological assessment is carried out and a Flood Risk Assessment prepared.

Climate Change predictions may result in flood outlines greater than existing Flood Zone 2. Processing plant/storage/stockpiles should preferably be located in Flood Zone 1, and should be located as far from Flood Zones 2 & 3 as reasonably possible.

Viability

This is a new site proposal. The mineral on the site has been proven, and issues such as site access seem achievable. If part of the site was sterilised through creation of a buffer against the Conservation Area to the north, this could

affect viability. However, this site is being worked in sequence with the AS26 Hurst Farm site and together it is felt they provide a viable quantum of mineral, even if the Station Road site is reduced in size.

Heritage Impacts

The northern boundary of the site as identified is close to the boundary of the Moreton Conservation Area, including Listed Buildings. There is already an 80m buffer proposed, between Station Road and the edge of the proposed allocation AS25 Station Road. This proximity, and the impact the development of the site would have on the setting of these heritage assets must be carefully considered against the public and other benefits of aggregate production.

Policy/Legislative Background

The Historic England website notes:

When making a decision on all listed building consent applications or any decision on a planning application for development that affects a listed building or its setting, a local planning authority must have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. Preservation in this context means not harming the interest in the building, as opposed to keeping it utterly unchanged.

This obligation, found in sections 16 and 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, applies to all decisions concerning listed buildings.

*The recent Court of Appeal decision in the case of Barnwell vs East Northamptonshire DC 2014(2) made it clear that in enacting section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 (1) Parliament's intention was that **'decision makers should give "considerable importance and weight" to the desirability of preserving the setting of listed buildings' when carrying out the balancing exercise**.*

Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (" the 1990 Act ") provides:

"(1) In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses."

Section 72 of the 1990 Act provides:

"(1) In the exercise, with respect to any buildings or other land in a conservation area, of any of the provisions mentioned in sub-section (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.

(2) The provisions referred to in sub-section (1) are the planning Acts ..."

A finding of harm to the setting of a listed building is a consideration to which the decision-maker must give "considerable importance and weight" (The Bath Society v Secretary of State for the Environment [1991] 1 W.L.R. 1303, per Glidewell LJ at 1319; and see East Northamptonshire District Council v Secretary of State for Communities and Local Government [2015] 1 W.L.R. 45 , per Sullivan LJ at [22]–[23] and [29]).

The relevant policies of the National Planning Policy Framework are paragraphs 128–135, the material parts of which provide:

"128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance...

129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise...

131. In determining planning applications, local planning authorities should take account of:

“the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; ...”

132. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation. The more important the asset, the greater the weight should be ...

133. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply: ...

134. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

135. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset.”

The National Planning Policy Framework (paragraph 144) also states:

When determining planning applications, local planning authorities should:

- *give great weight to the benefits of the mineral extraction, including to the economy;*

Commentary

In considering the potential development of the Station Road site, with acknowledged impacts on a designated heritage asset, the following points have been taken into consideration.

- There is “a strong presumption against harm to designated assets” (Barnwell [2014] EWCA Civ 137; Forge Field [2014] EWHC 1895 (Admin))
- “Considerable weight” must be given to harm to designated assets, however slight, if more than de minimis (Barnwell; Forge Field; Jones [2015] EWCA Civ 1243)
- *Mordue v Secretary of State for Communities and Local Government and others* [2015] EWCA Civ 1243. Heritage assets have statutory protection, unlike other material considerations; and the NPPF has a complex template for their consideration. Both must be considered in an assessment.
- Failure to assess alternative sites on appropriate public interest criteria (Forge Field; ENV4)
- The policy presumption in favour of sustainable development does not apply to cases of harm to designated assets (Gladman [2016] EWHC 421 (Admin))
- Cumulative effects must be considered (PPG)
- All recognised harm must be included in the recommended Planning balance (Barnwell)
- Undue weight should not be given to the temporary nature of development (National Wind Power [1999] N.P.C. 128)

Development of the site would not cause substantial harm to the Conservation Area and the Listed Buildings but would have an impact on its setting. Development of the site would result in temporary harm to the setting of these heritage assets – this would be ‘less than substantial’ harm, for a temporary period. This harm has been given great and considerable weight in this assessment.

A range of sites nominated for allocation in the Mineral Sites Plan for sand and gravel quarries have been assessed on heritage grounds and on a range of other grounds. A number have been rejected for reasons other than heritage issues. The remaining sites have been included in the Draft Mineral Sites Plan.

The proposal is for a temporary period, after which the site will be restored and the impact on the heritage asset setting will be removed.

The Heritage Impact Assessment that would be carried out as part of any planning application would identify the setting of the heritage assets and would identify appropriate mitigation to offset the harm to the setting resulting from development of the site to a level that would allow the development to go ahead.

It is expected that the mitigation would be a combination of screening (an earth bund) and a standoff/buffer.

If mitigation is not possible, or if the necessary standoff was such that it made the site uneconomic to develop, then the development would not go ahead.

In considering potential impacts and mitigation, it must be remembered that this is not a planning application, but a nomination for allocation of a site in the Mineral Sites Plan. The evidence required and level of assessment carried out at this stage are considered to be proportionate and appropriate. At the planning application stage a detailed Heritage Impact Assessment on the assets and their settings will be carried out, as part of an Environmental Impact Assessment, and the appropriate mitigation identified and applied.

At the current stage, the Mineral Planning Authority is considering whether the proposed nomination can reasonably be allocated through the Mineral Sites Plan, on the understanding that appropriately detailed assessment work will be carried out at a later date, and appropriate mitigation applied.

Although inclusion in an adopted plan gives a site allocation greater weight and likelihood of development, it is not deemed planning permission. Any allocation in an adopted plan still needs to go through the full planning application process, including Environmental Impact Assessment, and if impacts are identified that cannot be satisfactorily mitigated, the proposal will not receive permission.

It is considered, taking into account:

- the less than substantial harm to the setting of the heritage assets;
- the great and considerable weight given to such harm, and the strong presumption against such harm;
- the temporary nature of the harm
- the great weight to be given to the provision of mineral
- the fact that minerals must be worked where they are found
- the fact that this is likely to be an extension site, with the processing plant and other infrastructure already available
- the fact that the proposed development will be subject to planning application including Environmental Impact Assessment, and impacts on the setting will be assessed in detail and appropriate mitigation identified
- protection provided through provisions in the Mineral Sites Plan

that the public benefit to be received from this proposed development, and the nature and duration of the development causing harm, together with the scope for mitigating this harm, are such that the site should be allocated in the Mineral Sites Plan.

Cumulative Impacts

This site is a new proposal in an area where there is already mineral working. Depending on when it might start and what other sites are operating in the area, there could be an increased level of traffic on local roads, including the B3390.

There are no sites allocated for major development in the Purbeck Local Plan Part 1 (adopted Nov 2012) within 5 km of the proposal. The emerging Purbeck District Council Plan has considered housing development in the vicinity, as has the emerging West Dorset District Council plan.

NB: Further work has been undertaken on cumulative impacts for all sites. This information is presented in a separate document that should be read alongside this report and indicates that there is potential for cumulative or synergistic effects in relation to biodiversity; human health; soil; water; air/dust; climate/GHGs; cultural heritage

(archaeology/Listed Buildings); landscape and amenity. This could occur in the short to medium term and also has beneficial effects through reduction in nitrates entering the water and being transferred to Poole Harbour.

In most cases impacts would be expected in the short to medium term. In the longer term, as restoration proceeds, impacts are expected to reduce. There are no permanent changes expected that will affect amenity. Proposed modification to the DGs requires cumulative impacts to be taken into consideration. The MPA is satisfied that identified impacts can be satisfactorily addressed by DGs and existing/proposed policy.

There is potential for in-combination effects in relation to landscape, amenity and heritage. This could occur in the short to medium term in respect of landscape which contributes to the setting of heritage assets and where the amenity of residents and visitors could be affected by visual/noise impacts if there is a loss of existing tree belts. In the long term restoration ensures that the openness of the river valley pasture will be maintained. Potential long term benefits through restoration, including possible creation of multi-functional green infrastructure which is identified in the restoration vision. DGs require cumulative impacts to be taken into consideration .

Transport modelling has been carried out which indicates that the road network can carry the possible traffic levels. Quarry traffic can be held back during peak flow times, to minimise impacts. It is considered that any cumulative impacts can be satisfactorily mitigated.

The potential for cumulative impacts with other mineral workings is proposed to be addressed through a series of detailed additional development guidelines proposed as modifications to the Plan.

Summary.

Potential Benefits	Potential Impacts
<ul style="list-style-type: none"> • Provision of aggregate to support the local and wider economy, with accompanying benefits to the economy. • Improved public access may be possible as a part of site restoration. • Reduction of nitrates entering the ground and surface waters and the Frome, possibly on a long-term basis, with benefits to water quality and to nature conservation designations in Poole Harbour. 	<ul style="list-style-type: none"> • Further information will be required on hydrogeology at planning application stage. • Surface drains flow across the surface and any impacts on these will need to be appropriately mitigated. • Development of this site could have significant impacts on archaeology or landscape. Further assessment is required but it is expected that any impacts will be capable of mitigation. • All soils to be properly removed, stored and used in restoration, to minimise impacts on soils. • A Transport Assessment will be required and there may be some transport-related impacts, but it is expected that these will be capable of mitigation. • Development of this site could lead to impacts on neighbouring properties and the village of Moreton. However, all impacts will be required to be appropriately mitigated and it is expected that this will be possible, particularly given the size of the site.

Overall Recommendation:

This is a new site proposal. Further assessment is required to identify all potential impacts along with required mitigation. The proposal offers benefits, including reducing the flow of agricultural fertilisers into the groundwater, the Frome and ultimately into Poole Harbour. It is removed from the protected heathland designations. It is expected that impacts on amenity can be satisfactorily mitigated.

On balance, it appears reasonable on the basis of evidence available that the impacts identified in this sustainability appraisal are capable of satisfactory mitigation and the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Updated Recommendation (February 2019)

A series of development guidelines are proposed as modifications to the Mineral Sites Plan. These modifications provide additional details, in particular, relating to cumulative impacts that overall will reduce the impacts of working. The site therefore remains appropriate for allocation in the Bournemouth, Dorset and Poole Mineral Sites Plan

Aggregates: AS26 Hurst Farm, Moreton (February 2019)

Site Name/Location: AS26 Hurst Farm, Moreton Mineral Type: Sand and gravel		Nominee/Agent: Moreton Estate / Halletec Environmental Local Authority: Purbeck District Council	
Site Area: approximately 75 ha	Production: approximately 200,000 tpa	Reserve: approximately 3.3 mt	

Impact Assessment Scoring

-	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain
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Timescales for effects:

P/W: Preparation and Working

R/A: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	N/A	N/A	<ul style="list-style-type: none"> This Objective is not relevant to this site nomination 	<ul style="list-style-type: none"> N/A
2. To maintain, conserve and enhance biodiversity	++	+	<p>European/International Designations</p> <ul style="list-style-type: none"> The permanent change from intensive agriculture to mineral extraction restored to extensive grassland and water bodies would be likely to result in a significant reduction in nitrate levels in receiving waters of the R. Frome, groundwater and Poole Harbour (SPA and Ramsar). If this can be secured there would be strategic nature conservation gain. In addition, reduction in intensive agricultural management of the fields between the proposed extraction area and the R. Frome would be an additional significant gain, preventing more direct runoff of fertiliser into the river and onward to Poole Harbour. These benefits will be realised from the time that the fields are taken out of agricultural production. 	<ul style="list-style-type: none"> Minimise the area returned to intensive agriculture after working and maintain an area of land between the proposed site and the Frome as non-agricultural use land. The restoration/vision is proposed to be modified to give greater priority and recognition to the benefits of wetland restoration.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0	Annex 1 Bird Species <ul style="list-style-type: none"> No significant impacts expected 	<ul style="list-style-type: none"> No action required.
	++	+	National Designations <ul style="list-style-type: none"> Comments made under European/International designations (above) apply to national designations as well 	<ul style="list-style-type: none"> Minimise the area returned to intensive agriculture after working and maintain the fields between site and Frome as non-agricultural use land.
	0	0	Protected species <ul style="list-style-type: none"> No significant impacts expected 	<ul style="list-style-type: none"> No action required.
	+	+	Local recognitions/designations, including ancient woodland and veteran trees <ul style="list-style-type: none"> Site has potential to contribute to Water Framework Directive (WFD) targets and reduce nitrate enrichment within downstream water bodies if restored to partial wetland. 	<ul style="list-style-type: none"> Further consideration to be given to restoration options and contributing to WFD targets.
	+	0	<ul style="list-style-type: none"> The extraction of tertiary deposits and created exposures are of on-going interest to Tertiary and Quaternary geo-scientists as potential, if not active, research sites. No specific scientific gains or geodiversity enhancements are likely but the exposures may be of interest to the quaternary and tertiary research associations. Provision should be made so that it will be possible to arrange such visits on request. 	<ul style="list-style-type: none"> Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the	?	+	Groundwater <ul style="list-style-type: none"> Site boundary is within 100 m of a groundwater SPZ1 and there is a licensed abstraction within 250m (adjacent). The proposed development will need to be supported with a hydrogeological risk assessment at the planning application stage as Hurst Farm is on the border with 	<ul style="list-style-type: none"> Hydrological assessment required at planning application stage to determine possible impacts on ground and surface waters, with appropriate mitigation to be implemented.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
consumption of water in a sustainable way.	++		<p>a groundwater Source Protection Zone 1 (SPZ1) and a licensed abstraction.</p> <ul style="list-style-type: none"> Development has the potential to reduce the level of nitrate entering the groundwater and affecting the Frome and Poole Harbour. 	<ul style="list-style-type: none"> Where necessary mitigating measures should be installed to maintain groundwater levels. Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. Any fuel on site should be properly stored to avoid contamination in case of spillage. Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	?		<p>Surface Water</p> <ul style="list-style-type: none"> There are watercourses shown running within the proposed site and River Frome runs north of the site boundary. It will need to be proved that the minerals proposals will not have an adverse effect on the natural hydrology and water quality. 	
	++	+	<ul style="list-style-type: none"> Restoration proposals should incorporate gain of wetland features which will contribute to the aspirations of the England Biodiversity Strategy. Ensure no impacts from this development and no increased sedimentation. Development has the potential to reduce the level of nitrate entering the Frome and Poole Harbour. 	
5. To reduce flood risk and improve flood management.	0	0	<p>Flooding/Coastal Stability</p> <ul style="list-style-type: none"> Since part of the site (approximately 10 hectares) lies within Flood Zones 2 and 3, should the actual working area encroach within the floodplain (Flood Zones 2 & 3) there is a requirement to demonstrate application of the Sequential Test. Processing plant and ancillary infrastructure will be sited outside of Flood Zones 2 & 3 and will not constitute a flood risk. There will be no storage of materials within the flood plain. A site specific Flood Risk Assessment (FRA) will be required in support of any future planning application. 	<ul style="list-style-type: none"> Flood Risk Assessment (FRA) will be required. All necessary mitigation to be implemented.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).	?	0	<p>Archaeology</p> <ul style="list-style-type: none"> • There is possibly a watermeadow system on part of the site. The Dorset Historic Environment Record mentions a find of prehistoric flint within the site, and the Scheduled Monument of Hurst Bridge (1002422) lies not far to the east. • The presence (or not) of features associated with the watermeadow systems needs to be determined, then the impact on them, and on the setting of Hurst Bridge and other historic features and on below-ground archaeology needs to be assessed and evaluated before an informed planning decision could be made. • Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from a 'Very Significant Adverse Impact' to 'No Significant or Negligible Adverse Impacts'. 	<ul style="list-style-type: none"> • Archaeological survey of the area will be required to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working. • All necessary mitigation to be implemented. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Assessment to include consideration of current land use and field pattern. • Further consideration to be given to restoration proposals, in terms of historic landscapes. • A modification is proposed to ensure that a Heritage and setting Assessment is prepared. Furthermore, a series of mitigation measures are set out.
	?	0	<p>Historic Landscapes</p> <ul style="list-style-type: none"> • The site lies in the broad lower section of the valley of the river Frome. Historically some of the land here was heathland, other parts being wooded and under arable cultivation. On the flat lands close to the river itself, extensive systems of watermeadows were constructed from the 18th century onwards. Map evidence suggests that there may well be remains of a watermeadow system on the northern part of this site • The impact on the watermeadow systems in particular needs to be assessed and evaluated. Only when this has happened would the impact on the historic landscape be understood – at present it could be anywhere from a 'Very Significant Adverse Impact' to 'No Significant or Negligible Adverse Impacts'. 	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	??	0	<p>Historic Buildings</p> <ul style="list-style-type: none"> The two closest historic buildings look away from the site and are screened from it by hedges and trees. The presence of these heritage assets constitutes a potential constraint that has been given considerable weight and importance. 	<ul style="list-style-type: none"> Any assessment required to be carried out, with appropriate mitigation implemented as required. If the impacts cannot be mitigated satisfactorily the site will not be developed. A modification is proposed to ensure that a Heritage and setting Assessment is prepared. Furthermore, a series of mitigation measures are set out.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	-	0	<p>Landscape Capacity</p> <ul style="list-style-type: none"> Less significant landscape impact. Landscape capacity to accommodate the site is medium. The main impacts for the site will be from the B3390 as there are no rights of way through or near the site. Development will create a medium adverse impact on the openness of the river valley pasture landscape and a significant adverse impact on the pattern of field boundary hedgerows. 	<ul style="list-style-type: none"> Assessment of potential visual impacts required and all appropriate mitigation to be included. Restoration could include increasing public access/informal recreation and including appropriate nature conservation interests. Advance planting to be carried out to prepare site for working. An additional development guideline is proposed to ensure visual impacts on sensitive development to the north are minimised.
	0	0	<p>Designated Landscapes</p> <ul style="list-style-type: none"> No impact on designated landscapes or their setting. 	
8. To protect and improve air quality and reduce the	?	0	<ul style="list-style-type: none"> Impacts on air quality expected to be negligible. No AQMAs will be affected by the working of this site proposal. Any dust resulting from 	<ul style="list-style-type: none"> Environmental protection measures to reduce dust and ensure

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
impacts of noise.			<p>working will be controlled through normal dust-suppression measures.</p> <ul style="list-style-type: none"> Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site. 	<p>noise is appropriately mitigated.</p> <ul style="list-style-type: none"> An additional development guideline is proposed to ensure noise impacts are minimised from sensitive development to the north.
9. To maintain, conserve and enhance soil quality.	-	0	<ul style="list-style-type: none"> Site contains/comprises good to moderate quality agricultural land. Working the site will have impacts on this soil. Soils will be stripped and removed to be stored and. Restoration will return the land to original ground levels, and will restore the quality of the land. 	<ul style="list-style-type: none"> Soil to be properly stripped and stored prior to working; protected during working; and returned as part of restoration.
10. To conserve and safeguard mineral resources.	++	0	<ul style="list-style-type: none"> The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole. 	<ul style="list-style-type: none"> No specific action required. Site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	0	0	<ul style="list-style-type: none"> This proposal does not at present promote the use of alternative materials. It is possible that treated inert waste will be used in restoration of the site, but this will not directly promote the use of alternative materials. 	<ul style="list-style-type: none"> No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	<ul style="list-style-type: none"> Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective. 	<ul style="list-style-type: none"> Ensure principles of sustainable development are incorporated into the development of this site.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
13. To promote and encourage sustainable economic growth	+	0	<ul style="list-style-type: none"> This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. Mineral working has the potential to negatively affect businesses in the locality, e.g. through contributing to traffic congestion, noise, visual and perception related issues. Impacts will be identified and mitigation during working will be applied where necessary – e.g. holding back quarry traffic during peak travel times, further screening. Restoration to agriculture with some element of public access will, if achieved, offer some economic benefits through both the agriculture and the recreational attraction and use in the wider area (i.e. riding, walking). 	<ul style="list-style-type: none"> Full assessment of possible impacts, including on business in the vicinity, and mitigation to be identified and implemented. Further assessment required to form a view as to what the most appropriate restoration could be.
14. To adapt to and mitigate the impacts of climate change.	-	0	<ul style="list-style-type: none"> Developing the site as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small. 	<ul style="list-style-type: none"> Use energy efficient plant and machinery. Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals	-?	0	<ul style="list-style-type: none"> This site has an estimated 200,000 tonnes annual output and approximately 80 vehicle trips per day (40 in and 40 out). Access to the site is proposed via an existing large farm access to the B3390. 	<ul style="list-style-type: none"> Transport Assessment to be carried out, identifying opportunities

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
transport on the transport network, mitigating any residual impacts.			<ul style="list-style-type: none"> • Visibility for 60 mph would need to be secured but is achievable from this access. The specific geometry of the access will need to be checked and it may be necessary to provide some localised widening to ensure that vehicles can enter and leave at the same time and pass on the farm access road. These details would be covered by a full Transport Assessment which would be required were this site to be submitted as a planning application. • Any TA should initially be scoped with the Transport Development Management Team. It may also need to consider Highways Agency concerns with regards to movements to the A35T. • Due to the direct access from this site onto the B3390, and the reasonable possibility of an acceptable access provision, this site has been given a "No Significant or Negligible Adverse Impacts" rating. 	for reducing impacts on the transport network.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	-	0	<ul style="list-style-type: none"> • The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy. 	<ul style="list-style-type: none"> • Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	-	0	<p>Impact on Sensitive Human Receptors</p> <ul style="list-style-type: none"> • There are residential properties within site, adjacent to site and in vicinity of site, including properties and businesses on the other side of the river. • Site is large enough to include appropriate mitigation to adequately screen properties from visual/noise impacts. • Impact will be somewhere between 'Significant' and 'Less Significant', given size of site and levels of screening existing and to be created. 	<ul style="list-style-type: none"> • Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to increase public access. • Mitigation such as screening, bunding and

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	?	0	<p>Impact on Existing Settlements</p> <ul style="list-style-type: none"> Closest settlements include Moreton, Tincton and Crossways. All are screened by existing trees/woodlands. Villages along the B3390 may be affected by site traffic. Impact will be somewhere between 'Significant' and 'Less Significant', given size of site and levels of screening existing and to be created. 	<p>standoffs are expected to be able to adequately address any impacts.</p> <ul style="list-style-type: none"> Cumulative impacts on surroundings of working along with the adjacent Woodsford Extension to be taken into consideration and mitigated against. <p>Further protection provided through modification to plan.</p>
	0	0	<p>Impact on Airport Safety</p> <ul style="list-style-type: none"> The site is some 35 km from the airport and not considered to be a threat. 	<ul style="list-style-type: none"> No action required.
18. To enable safe access to countryside and open spaces.	0	+?	<p>Impact on Recreational Land</p> <ul style="list-style-type: none"> Site is agricultural land and does not appear to include any formal or informal recreational facilities. Restoration could include some element of public access. 	<ul style="list-style-type: none"> No action required for working. Consider including some aspect of public access as part of restoration.
	0	+ ?	<p>Impact on Public Rights of Way</p> <ul style="list-style-type: none"> Site is agricultural land and there are no public rights of way on, adjacent to or visible from the land. Restoration could include some element of public access. 	<ul style="list-style-type: none"> Consideration to be given to opportunities for improving public access in the area through restoration.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
<ul style="list-style-type: none"> • Watercourses • Ponds/lakes, including wet habitats • Groundwater 	<ul style="list-style-type: none"> • The River Basin Management Plan South West River Basin District identifies the Frome as being of 'Poor' environmental quality in this area. Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies. • Impacts on or removal of surface water features. 	<ul style="list-style-type: none"> • Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Frome or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. • Relocation of surface water features, provided this is feasible. • Need to consider compliance to the Restoration Plan for the River Frome and its floodplain. 	<ul style="list-style-type: none"> • Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating surface water features and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is mostly within Flood Zone 1, and partly within Flood Zones 2 & 3.

Some risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Sand and gravel extraction is water compatible, so suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Climate Change predictions may result in flood outlines greater than existing Flood Zone 2. Processing plant/storage/stockpiles should preferably be located in Flood Zone 1, and should be located as far from Flood Zones 2 & 3 as reasonably possible.

Viability

This is a new site proposal. The mineral on the site has been proven, and issues such as site access seem achievable. If part of the site was sterilised through creation of a buffer against the heritage assets to the east, this could potentially affect viability. However, this site is being worked in sequence with the AS25 Station Road site and together it is felt they provide a viable quantum of mineral, even if this site (and Station Road) is reduced in size.

Cumulative Impacts

This site is a new proposal in an area where there is already mineral working. Depending on when it might start and what other sites are operating in the area, there could be an increased level of traffic on local roads, including the B3390.

There are no sites allocated for major development in the Purbeck Local Plan Part 1 (adopted Nov 2012) within 5 km of the proposal. The emerging Purbeck District Council Plan has considered housing development in the vicinity, as has the emerging West Dorset District Council plan.

Transport modelling has been carried out which indicates that the road network can carry the possible traffic levels. Quarry traffic can be held back during peak flow times, to minimise impacts. It is considered that any cumulative impacts can be satisfactorily mitigated.

There could be a cumulative impact if this site proposal was to be worked simultaneously with the proposed Woodsford Extension, immediately to the west. This could lead to disturbance to properties on the north side of the Frome. This issue should be addressed at the planning application stage. The northern boundary of the site will be pulled back to provide a greater buffer.

The potential for cumulative impacts with other mineral workings is proposed to be addressed through a series of detailed additional development guidelines proposed as modifications to the Plan.

NB: Further work has been undertaken on cumulative impacts for all sites. This information is presented in a separate document that should be read alongside this report and indicates that there is potential for cumulative effects in relation to biodiversity; human health; soil; water; air/dust; climate/GHGs; cultural heritage (archaeology/Listed Buildings); landscape and amenity. These are expected to occur primarily in the short to medium term.

There is potential for in-combination effects in relation to landscape, amenity and heritage. This could occur in the short to medium term in respect of landscape which contributes to the setting of heritage assets and where the amenity of residents and visitors could be affected by visual/noise impacts in this open landscape.

Potential long term benefits through restoration, including possible creation of multi-functional green infrastructure which is identified in the restoration vision. In the long term restoration ensures that the open landscape will be maintained. There are no permanent changes expected that will affect amenity. The DGs require cumulative impacts to be taken into consideration.

In most cases impacts would be expected in the short to medium term. In the longer term, as restoration proceeds, impacts are expected to reduce. The MPA is satisfied that identified impacts can be satisfactorily addressed by DGs and existing/proposed policy.

Heritage Impacts

There are Listed Buildings to the east of the site, across the B3390 and screened to some extent by vegetation.

Proper assessment of these heritage assets and their settings is required to establish the impact the development of the site would have on the setting of these heritage assets, and the great and considerable weight given to this impact, carefully considered against the public and other benefits of aggregate production.

Policy/Legislative Background

The Historic England website notes:

When making a decision on all listed building consent applications or any decision on a planning application for development that affects a listed building or its setting, a local planning authority must have special regard to the

desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. Preservation in this context means not harming the interest in the building, as opposed to keeping it utterly unchanged.

This obligation, found in sections 16 and 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, applies to all decisions concerning listed buildings.

The recent Court of Appeal decision in the case of Barnwell vs East Northamptonshire DC 2014(2) made it clear that in enacting section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 (1) Parliament's intention was that 'decision makers should give "considerable importance and weight" to the desirability of preserving the setting of listed buildings' when carrying out the balancing exercise'.

Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (" the 1990 Act ") provides:

"(1) In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses."

Section 72 of the 1990 Act provides:

"(1) In the exercise, with respect to any buildings or other land in a conservation area, of any of the provisions mentioned in sub-section (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.

(2) The provisions referred to in sub-section (1) are the planning Acts ..."

A finding of harm to the setting of a listed building is a consideration to which the decision-maker must give "considerable importance and weight" (The Bath Society v Secretary of State for the Environment [1991] 1 W.L.R. 1303, per Glidewell LJ at 1319; and see East Northamptonshire District Council v Secretary of State for Communities and Local Government [2015] 1 W.L.R. 45 , per Sullivan LJ at [22]–[23] and [29]).

The relevant policies of the National Planning Policy Framework are paragraphs 128–135, the material parts of which provide:

"128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance... 129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise...

131. In determining planning applications, local planning authorities should take account of:

"• the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; ..."

132. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. ...

133. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply: ...

134. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

135. *The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset.*"

The National Planning Policy Framework (paragraph 144) also states:

When determining planning applications, local planning authorities should:

- *give great weight to the benefits of the mineral extraction, including to the economy;*

Commentary

In considering the potential development of the Hurst Farm site, with acknowledged impacts on a designated heritage asset, the following points have been taken into consideration.

- There is "a strong presumption against harm to designated assets" (Barnwell [2014] EWCA Civ 137; Forge Field [2014] EWHC 1895 (Admin))
- "Considerable weight" must be given to harm to designated assets, however slight, if more than de minimis (Barnwell; Forge Field; Jones [2015] EWCA Civ 1243)
- *Mordue v Secretary of State for Communities and Local Government and others* [2015] EWCA Civ 1243. Heritage assets have statutory protection, unlike other material considerations; and the NPPF has a complex template for their consideration. Both must be considered in an assessment.
- Failure to assess alternative sites on appropriate public interest criteria (Forge Field; ENV4)
- The policy presumption in favour of sustainable development does not apply to cases of harm to designated assets (Gladman [2016] EWHC 421 (Admin))
- Cumulative effects must be considered (PPG)
- All recognised harm must be included in the recommended Planning balance (Barnwell)
- Undue weight should not be given to the temporary nature of development (National Wind Power [1999] N.P.C. 128)

Development of the site would not cause substantial harm to the Conservation Area and the Listed Buildings but would have an impact on its setting. Development of the site would result in temporary harm to the setting of these heritage assets – this would be 'less than substantial' harm, for a temporary period. This harm has been given great and considerable weight in this assessment.

A range of sites nominated for allocation in the Mineral Sites Plan for sand and gravel quarries have been assessed on heritage grounds and on a range of other grounds. A number have been rejected for reasons other than heritage issues. The remaining sites have been included in the Draft Mineral Sites Plan.

The proposal is for a temporary period, after which the site will be restored and the impact on the heritage asset setting will be removed.

The Heritage Impact Assessment that would be carried out as part of any planning application would identify the setting of the heritage assets and would identify appropriate mitigation to offset the harm to the setting resulting from development of the site to a level that would allow the development to go ahead.

It is expected that the mitigation would be a combination of screening (an earth bund) and a standoff/buffer.

If mitigation is not possible, or if the necessary standoff was such that it made the site uneconomic to develop, then the development would not go ahead.

In considering potential impacts and mitigation, it must be remembered that this is not a planning application, but a nomination for allocation of a site in the Mineral Sites Plan. The evidence required and level of assessment carried out

at this stage are considered to be proportionate and appropriate. At the planning application stage¹² a detailed Heritage Impact Assessment on the assets and their settings will be carried out, as part of an Environmental Impact Assessment, and the appropriate mitigation identified and applied.

At the current stage, the Mineral Planning Authority is considering whether the proposed nomination can reasonably be allocated through the Mineral Sites Plan, on the understanding that appropriately detailed assessment work will be carried out at a later date, and appropriate mitigation applied.

Although inclusion in an adopted plan gives a site allocation greater weight and likelihood of development, it is not deemed planning permission. Any allocation in an adopted plan still needs to go through the full planning application process, including Environmental Impact Assessment, and if impacts are identified that cannot be satisfactorily mitigated, the proposal will not receive permission.

It is considered, taking into account:

- the less than substantial harm to the setting of the Listed Buildings ;
- the great and considerable weight given to such harm, and the strong presumption against such harm;
- the temporary nature of the harm
- the great weight to be given to the provision of mineral
- the fact that minerals must be worked where they are found
- the fact that the proposed development will be subject to planning application including Environmental Impact Assessment, and impacts on the setting will be assessed in detail and appropriate mitigation identified
- the protection provided through the Mineral Sites Plan

that the public benefit to be received from this proposed development, and the nature and duration of the development causing harm, together with the scope for mitigating this harm, are such that the site should be allocated in the Mineral Sites Plan.

Summary.

Potential Benefits	Potential Impacts
<ul style="list-style-type: none"> • Provision of aggregates required for maintenance and construction of the built environment. • Provision of aggregate to support the local and wider economy, with accompanying benefits to the economy. • Restoration could include some increased and improved public access. • Working the site will provide benefits to nature conservation, ground and surface water and European and national nature conservation designations, through removing then limiting the flow of nitrates into ground and surface waters. • Restoration to offer nature conservation benefits through management of the northern part of the site as wetland and reducing the land under intensive agriculture. 	<ul style="list-style-type: none"> • Further information is required on hydrogeology, as the site is close to a Source Protection Zone 1. • Surface drains flow across the surface, and these will need to be appropriately dealt with. • Development of this site could have significant impacts on archaeology, historic landscapes and landscape capacity. Further assessment is required, with appropriate mitigation to be identified and implemented. • Impacts, with great weight attached, on heritage assets in vicinity. • Soils to be appropriately managed and protected. • A full Transport Assessment with impacts and mitigation identified will be required.

¹² Dorset County Council is currently considering an application for the development of the Hurn Court Farm Extension

- There are likely to be impacts on neighbouring properties and businesses, particularly if this site and Woodsford Extension were to be worked simultaneously. Appropriate mitigation to be identified and implemented – this will include phasing of working to reduce impacts and pulling northern boundary back

Overall Recommendation:

This is a new site proposal. Further assessment is required to identify all potential impacts along with required mitigation. The proposal offers the strong benefit of reducing the flow of agricultural fertilisers into the groundwater, the Frome and ultimately into Poole Harbour. It is also removed from the protected heathland designations. As a large site it is expected that impacts on amenity can be satisfactorily mitigated.

Working this site will have impacts, but it is expected that these can be overcome through appropriate mitigation. Further assessment will be required to gain a better understanding of what the impacts might be and how best to mitigate.

Impacts on Listed Buildings and their settings must be carefully considered at planning application stage, to ensure full mitigation.

The issue of cumulative impact must be carefully addressed. The proposed site is immediately adjacent to the proposed Woodsford Extension and adjacent areas of these two sites should not be worked simultaneously, particularly in the northern parts of each site, to minimise impacts on residences and businesses across the river.

Pulling the northern boundary back and leaving an area of unworked land to be managed as wetland will assist in both reducing nitrate flows to the river and reducing impacts on surrounding receptors.

On balance, it appears reasonable on the basis of evidence available that the impacts identified in this sustainability appraisal are capable of satisfactory mitigation and the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Updated Recommendation (February 2019)

A series of development guidelines are proposed as modifications to the Mineral Sites Plan. These modifications provide additional details, in particular, relating to cumulative impacts that overall will reduce the impacts of working. The site therefore remains appropriate for allocation in the Bournemouth, Dorset and Poole Mineral Sites Plan

Aggregates: AS27 Land at Horton Heath, Horton Road (February 2019)

Site Name/Location: AS27 Land at Horton Heath, Horton Road, Horton, Wimborne Mineral Type: Sand/Gravel	Nominee/Agent: Dorset Property Surveys Local Authority: East Dorset District Council	Site Area: 16.2 (approx.) Production/reserve: between 2,400,000t and 3,500,000t
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Impact Assessment Scoring

-	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain
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Timescales for effects:

P/W: Preparation and Working

R/A: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	N/A	N/A	<ul style="list-style-type: none"> This Objective is not relevant to this site nomination 	<ul style="list-style-type: none"> N/A
2. To maintain, conserve and enhance biodiversity	-	-	<p>European/International Designations</p> <ul style="list-style-type: none"> Area AS27 lies to the west of Horton Common SSSI, a component part of the Dorset Heaths SAC and Dorset Heathlands SPA/Ramsar. The site is hydrologically linked to the European sites and would once have fed the mire which historically ran from AS207 east to Horton Common SSSI. There is a layer of Broadstone Clay beneath the sand and gravel and disturbance of this risks affecting the hydrology of Horton Common SSSI. 	<ul style="list-style-type: none"> Further investigations will be needed to determine how to protect the hydrological link between AS27 and Horton Common SSSI.
	+	0	Annex 1 Bird Species	<ul style="list-style-type: none">

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<ul style="list-style-type: none"> Site is proposed to be restored to low grade pasture – this is unlikely to support Annex 1 birds. The site currently has no recreational access function to help reduce pressure on existing acid grasslands. 	
	-	-	<p>National Designations</p> <ul style="list-style-type: none"> Area AS27 lies to the west of Horton Common SSSI, a component part of the Dorset Heaths SAC and Dorset Heathlands SPA/Ramsar. The site is hydrologically linked to the European sites and would once have fed the mire which historically ran from AS207 east to Horton Common SSSI. There is a layer of Broadstone Clay beneath the sand and gravel and disturbance of this risks affecting the hydrology of Horton Common SSSI. 	<ul style="list-style-type: none"> Further investigations will be needed to determine how to protect the hydrological link between AS27 and Horton Common SSSI.
	+	+	<p>Protected species</p> <ul style="list-style-type: none"> Hedgerows should be assessed for dormice and to determine whether they are important under the Hedgerows Regs, 1997. 	<ul style="list-style-type: none"> Ecological surveys required, with appropriate mitigation identified.
	+			

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	-	+	<p>Local recognitions/designations, including ancient woodland and veteran trees</p> <ul style="list-style-type: none"> There may be important boundary features or individual veteran trees which would need assessment. 	<ul style="list-style-type: none"> Ecological surveys required, with appropriate mitigation identified.
3. To maintain, conserve and enhance geodiversity.	+	0	<ul style="list-style-type: none"> No specific scientific gains or geodiversity enhancements are likely, but the exposures may be of interest to the quaternary and tertiary research associations. 	<ul style="list-style-type: none"> Operator to be asked to permit visits to view exposures if required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	-	0	<p>Groundwater</p> <ul style="list-style-type: none"> Proximity to secondary aquifer 	<ul style="list-style-type: none"> Hydrological assessment required to demonstrate no significant negative impact on hydrogeological connectivity and pathways and surface water flow regimes. This is to protect river and wetland habitats and ecology, and also river users. Assessment to demonstrate that the proposed restoration will have no significant impact on water quality and cause no deterioration in WFD status. This is particularly relevant for sites adjacent to, and which drain to, watercourses and wetland features of interest. Any fuel on site should be properly stored to avoid contamination in case of spillage. Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. Land Drainage Consent to be obtained from Dorset County Council
	-	0	<p>Surface Water</p> <ul style="list-style-type: none"> There is a pond in close proximity. 	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				if works may affect flow of an ordinary watercourse.
5. To reduce flood risk and improve flood management	+	0	Flooding/Coastal Stability <ul style="list-style-type: none"> The entire site located within Flood Zone 1 Working is not considered to constitute, or exacerbate an existing, a flood risk. 	<ul style="list-style-type: none"> Flood Risk Assessment (FRA) will be required.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).	-	+	Archaeology <ul style="list-style-type: none"> An archaeological assessment and probably an evaluation of the site that considers all the Monuments and their settings, as well as other possible archaeological material on the site, is needed. An assessment needs to be undertaken to establish what is important about the SM; how the quarry sites contribute to the significance of the SMs and their setting; what would impact would quarrying have on the significance of the SMs; how could harm be avoided; could improvements be achieved. Quarrying impacts on topography and historic landform could have very significant impacts on the settings of the SMs and their inter-relationship within the landscape. The SMs here – prehistoric barrows and land boundary dikes - are all specifically 'landscape monuments', which have an intimate and highly significant relationship with the local topography; their relationship with the landform 	<ul style="list-style-type: none"> Archaeological survey to assess Monuments and establish their settings and how these can best be protected during working. Archaeological survey to assess possible presence and significance of non-designated remains. Adequate provision to be made for preservation, excavation or recording, as appropriate. Settings of the Monuments to be established prior to working and not to be compromised during working.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<p>and their inter-relationship with each other across the landscape are important factors in their heritage significance.</p> <ul style="list-style-type: none"> • Early discussion with English Heritage should also be helpful in the making of this decision. • Appropriate restoration could improve the settings of the monuments. 	
	-	+	<p>Historic Landscapes</p> <ul style="list-style-type: none"> • Site covers a wider area in a broad lower lying area of acid grassland and former acid grassland. It could have a significant impact on setting, in view of its location between the groups of SMs (the barrows on the ridge to the W and the barrows and earthwork dikes to the E). There is a suggestion that the area might be reinstated to original contours. However, this would entail a good supply of backfill material and very many vehicle movements, either of which could present high risk factors to satisfactory completion of a restoration scheme. This area, lower less undulating than the ridge to the west at AS08, has greater potential for archaeological features and would need careful evaluation. • Restoration to acid grassland could improve the settings of these Monuments. 	<ul style="list-style-type: none"> • Archaeological survey to assess Monuments and establish their settings and how these can best be protected during working. • Restoration to acid grassland to benefit Monuments and their settings, however this is not proposed.
	0	0	<p>Historic Buildings</p> <ul style="list-style-type: none"> • No listed buildings in the immediate vicinity of the site. The nearest, Harts Farm, is well screened from the site. No impacts expected. 	<ul style="list-style-type: none"> • No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	-	+	<p>Landscape Capacity</p> <ul style="list-style-type: none"> The whole area is within the Horton Common -Three Legged Cross Heath/Farmland Mosaic in the draft EDDC Landscape Character assessment. This assessment indicates the importance of belts of trees and scrub and all around the site these form key features with mature oaks along the western edges which are ancient boundaries. The site is also part of a prominent ridge line with open views especially to the east. The site has some landscape value and any future extraction should be limited in extent and be based on a detailed and independent assessment of landscape character so any future operations conserve and enhance key features and views and mitigation and restoration reflects existing character. The adjacent bridleway is a key visual receptor. It is important that prior to any application a full LVIA is carried out to assess impacts from all key visual receptors. 	<ul style="list-style-type: none"> Landscape and visual impact assessment to identify impacts; adequate mitigation of such impacts before and during working. Protect and maintain the identified key features of the site. Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
	0	0	<p>Designated Landscapes</p> <ul style="list-style-type: none"> Negligible impact expected. 	<ul style="list-style-type: none"> No action required.
8. To protect and improve air quality and reduce the impacts of noise.	0	0	<ul style="list-style-type: none"> Impacts on air quality expected to be negligible. No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. 	<ul style="list-style-type: none"> Environmental protection measures to be put in place to reduce dust and noise impacts.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<ul style="list-style-type: none"> Any impacts due to noise resulting from mineral working would be expected to be satisfactorily minimised through normal noise mitigation measures, imposed at the planning application stage. 	
9. To maintain, conserve and enhance soil quality.	-	0	<ul style="list-style-type: none"> The site comprises agriculture (primarily pasture) Site preparation/working would require stripping and storage of the soils, with some impacts on them. If the site is worked and restored to acid grassland this will require reinstatement/retention of acidic soils. 	<ul style="list-style-type: none"> Soil is poor quality in agricultural terms but valuable in terms of potential for acid grassland restoration. Soils to be stored/protected during preparation and working and properly reinstated during restoration.
10. To conserve and safeguard mineral resources.	++	0	<ul style="list-style-type: none"> The site will make a contribution to aggregates supply and thus have a positive impact on the local and wider economy. There is potential for quarry operations, including quarry traffic, to have a negative impact on local businesses. This would be further assessed at the planning application stage. 	<ul style="list-style-type: none"> Consideration will need to be given to the impact of quarry traffic on businesses locally.
11. To promote the use of alternative materials.	-	0	<ul style="list-style-type: none"> This proposal does not at present promote the use of alternative materials. 	<ul style="list-style-type: none"> No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	<ul style="list-style-type: none"> Development of this site will provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective. 	<ul style="list-style-type: none"> Ensure principles of sustainable development are incorporated into the development of this site.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
13. To promote and encourage sustainable economic growth	+	0	<ul style="list-style-type: none"> This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. Restoration to agriculture will offer some economic benefits. 	<ul style="list-style-type: none"> Further assessment required to form a view as to what the most appropriate restoration could be.
14. To adapt to and mitigate the impacts of climate change.	-	0	<ul style="list-style-type: none"> Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, but again these benefits will be relatively small. 	<ul style="list-style-type: none"> Use energy efficient plant and machinery. Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
	0	+		

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	0	0	<ul style="list-style-type: none"> For the purposes of assessment around 80 movements per day, has been assumed. The access serving the permitted solar farm should be suitable to accommodate this level of traffic. The existing Clump Farm access, on the brow of the hill to the west is unsuitable for any intensification of use. Once on the C2, there are good links to the A31 to the east. The A31 can also be reached to the south along the B3072 although this would involve travelling through West Moors. Development would have potential impacts on a number of A31 junctions, including Ameysford, West Moors, Brocks Pine and Ashley Heath. 	<ul style="list-style-type: none"> Transport Assessment to be carried out to identify the extent of the traffic impact on the strategic road network and any mitigation requirements
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	– --	0	<ul style="list-style-type: none"> The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy. 	<ul style="list-style-type: none"> Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	-	-/?	<p>Impact on Sensitive Human Receptors</p> <ul style="list-style-type: none"> There are a number of residences within 500m, the closest being approximately 50m. 	<ul style="list-style-type: none"> Provision of appropriate mitigation, following assessment of likely impacts.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	-		<ul style="list-style-type: none"> Mitigation (noise attenuation and visual screening bunds) will be required but it is likely that there will still be impacts, including from lorries on the access road. Further assessment will be required to assess impacts. 	
	-	0	<p>Impact on Existing Settlements</p> <ul style="list-style-type: none"> Verwood is approximately 1 km to the north-east, and Three Legged Cross over 1km to the south-east. These settlements are unlikely to experience any visual or noise impacts from working in the vicinity of the site. Lorries travelling from the site to the A31 will pass through Three Legged Cross and Ashley Heath and could have an impact. 	<ul style="list-style-type: none"> Transport Assessment to be carried, identifying possible impacts and opportunities for reducing impacts on the transport network.
	0	0	<p>Impact on Airport Safety</p> <ul style="list-style-type: none"> Site is located within 13km safeguarding zone, but not proposed for wet working. No impacts expected. 	<ul style="list-style-type: none"> No action required.
	-	0	<p>Impact on Recreational Land</p> <ul style="list-style-type: none"> Bridleways follow the boundaries of the site, and there are other rights of way in the vicinity. There will be impacts on users of these rights of way and these should be addressed. 	<ul style="list-style-type: none"> Consideration will be needed to mitigate impacts on rights of way during working.
18. To enable safe access to countryside and open spaces.	--	0	<p>Impact on Public Rights of Way</p> <ul style="list-style-type: none"> Bridleways follow the boundaries of the site. There will be impacts on users of these rights of way and these should be addressed. 	<ul style="list-style-type: none"> Full assessment of rights of way in the area required.
		+		

AS27 Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
<ul style="list-style-type: none"> Watercourses Ponds/lakes, including wet habitats to the north of the site Groundwater 	<ul style="list-style-type: none"> There is a layer of Broadstone Clay beneath the aggregate and disturbance of this risks affecting the hydrology of Horton Common Site of Special Scientific Interest, including the Dorset Heaths SAC and Dorset Heathlands SPA/RAMSAR. The River Basin Management Plan South West River Basin District identifies the Crane, the closest river, as being of 'good' ecological quality. Potential for contamination from runoff from site. Groundwater is of vital importance in this catchment and must be protected, as it supports a significant proportion of the abstraction for public water supply and other uses, for example aquaculture. Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. Contamination of water supplies or reduction in amount of water available for licensed supplies. Impacts on or removal of surface water features. 	<ul style="list-style-type: none"> Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Crane or groundwater unless silt has first been removed. Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. On-going monitoring during development and working of the site. Relocation or recreation of surface water features provided this is feasible. 	<ul style="list-style-type: none"> Full hydrogeological assessment Flood Risk Assessment Water Framework Assessment Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Assessment

Comment from Flood Risk Management Team, Dorset County Council, Lead Local Flood Authority: No grounds for objection, subject to detail:

The site falls entirely within Flood Zone 1 (low risk – fluvial flooding) according to the Environment Agency’s relevant flood modelling, and is not shown by relevant mapping to be at theoretical risk of surface water flooding. However, the site is seen to be approximately 1000m upstream / south of extensive fluvial, surface & ground water flooding adjacent to the Main River Crane, Bridge Farm & beyond, and is approximately 400m upstream of a number of on-line ponds (Wedge Hill Farm) which may well have a commercial and/or recreational purpose.

Whilst BGS data suggests that the site sits above a bedrock of a Parkstone Sand Member (sedimentary sand) with some overburden of River Terrace Deposits (sand & gravel) to the west, any existing surface water runoff or ground water emergence is perceived to migrate northwards into a receiving (Ordinary) watercourse, flowing towards the (man-made) ponds referred to above.

A site-specific strategy of surface water management should be requested that does not increase rates of runoff / generate downstream worsening or diminish water quality into the receiving system/s. As such the proposed activity should comply with the recommendations of the recently revised NPPF (July 2018) and other relevant legislation. Prior Land Drainage Consent may be required from DCC/FRM as relevant LLFA, for any works offering an obstruction to flow or realignment to a channel with the status of Ordinary Watercourse.

Cumulative Impacts

Although the area contains deposits of sand/gravel, the only other working is a small sand quarry that has recently been permitted immediately to the east of AS27 at Horton Common. Further afield it is proposed to work at Purple Haze, southeast of Verwood. Purple Haze is not yet operational, but may become so prior to Horton Heath being developed. Existing workings in Dorset are further away, although there are some workings just across the border in Hampshire. Horton Heath will be a new greenfield site. AS08 lies to the north west but is not proposed for inclusion in the Mineral Sites Plan.

The proposal lies within 5km of sites allocated for development in the Christchurch and East Dorset Local Plan - Part 1 Core Strategy Consolidated Plan Adopted April 2014. Policies VTSW4 and Policy VTSW5 allocate new neighbourhoods in Verwood. Traffic from these proposals would add to traffic on the B3081 and roads through Verwood.

Further cumulative impact screening work, presented as a separate document, indicates that there is potential for cumulative effects in relation to biodiversity; human health; water; climate/GHGs; cultural heritage (archaeology); landscape and amenity. In most cases impacts would be expected in the short to medium term. In the longer term, as restoration proceeds, impacts are expected to reduce. There are no permanent changes expected that will affect amenity. The MPA is satisfied that identified impacts can be satisfactorily addressed by DGs and existing/proposed policy.

There are also potential in-combination effects between biodiversity, water and material assets - seeking to ensure best returns of aggregate while ensuring the clay layer is not damaged thereby causing biodiversity impacts. Potential will remain during working, reducing during restoration.

Summary

Potential Benefits	Potential Impacts
<ul style="list-style-type: none"> Restoration to acid grassland would provide habitat for protected species and improve linkages between other heathland/acid grassland in the area. Provision of aggregates required for maintenance and construction. Restoration to acid grassland will benefit Scheduled Monuments and their settings and provide a link to the historic landscape that would have previously characterised the area around this site. 	<ul style="list-style-type: none"> Hydrological impacts on Horton Common SSSI Heritage/setting impacts - Scheduled Monuments and their settings could be affected during Preparation/Working. Screening vegetation will need to be retained on visual impact and nature conservation grounds. Noise/visual impacts on properties in the vicinity. Impacts on informal recreation uses and statutory rights of way that border the site.

Overall Recommendations

The AS27 Land at Horton Heath site has potential for working, but there is a high level of public rights of way in the area and rights of way run along two sides of the site area. Quarrying will affect the topography and the historic landform which could have significant impacts on the settings of Scheduled Monuments.

There is a need for a heritage impacts assessment. The potential for hydrological impacts on the Horton Common SSSI and European designations must be fully assessed, to ensure no impact.

The Mineral Planning Authority have concerns about the allocation of this site, due to the need for more detailed heritage work to inform the assessment and the potential for hydrological impacts. However, it would be a good source of Poole Formation sand.

Recommendation (May 2019)

Following the Hearing in February 2019, a series of development guidelines are proposed as modifications to the Plan. These modifications provide an appropriate level of confidence that mitigation to minimise the impacts of working to acceptable levels is possible. The site is considered appropriate for allocation in the Bournemouth, Christchurch, Poole and Dorset Mineral Sites Plan.

Crushed Rock: PK16 Swanworth Quarry Extension Assessment (February 2019)

Site Name/Location: PK16 Swanworth Quarry Extension Mineral Type: Limestone (primarily for crushing)	Nominee/Agent: Suttle Stone Quarries/Quarryplan Ltd Local Authority: Purbeck District Council	Site Area: c. 14 ha Production: c. 120,000 tpa Reserve: c. 1.7 million tonnes Estimated reserve has been updated to 2 million tonnes. This increase has been considered in the assessment review
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Impact Assessment Scoring

-	-	+	++	0	?
Strong Negative Impact	Minor Negative Impact	Minor Positive Impact	Strong Positive Impact	Negligible or No Effect	Uncertain

Timescales for effects:

P/W: Preparation and Working

R/A: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	N/A	N/A	<ul style="list-style-type: none"> This Objective is not relevant to this site nomination 	<ul style="list-style-type: none"> N/A
2. To maintain, conserve and enhance biodiversity	0	+	European/International Designations <ul style="list-style-type: none"> A sufficient stand-off from the Isle of Portland to Studland Cliffs SAC to the south would be required to ensure the long term stability of the SAC. Beyond that, restoration could offer significant habitat gain over the current intensive agricultural land use. 	<ul style="list-style-type: none"> Ensure appropriate stand-off is included. An additional development guideline has been proposed to clarify restoration proposals. This includes the integration of conservation interest and areas of natural revegetation.
	0	0	Annex 1 Bird Species <ul style="list-style-type: none"> No impacts expected. 	<ul style="list-style-type: none"> No action required.
	0	0	National Designations	<ul style="list-style-type: none"> No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<ul style="list-style-type: none"> No impacts expected. 	
	0	0	<p>Protected species</p> <ul style="list-style-type: none"> No impacts expected. 	<ul style="list-style-type: none"> No action required.
	0	0	<p>Local recognitions/designations, including ancient woodland and veteran trees</p> <ul style="list-style-type: none"> No impacts expected. 	<ul style="list-style-type: none"> No action required.
3. To maintain, conserve and enhance geodiversity.	+	0	<ul style="list-style-type: none"> The Purbeck limestone group has an important association with the geology of the Jurassic Coast World Heritage Site. Working quarries in Purbeck have been known to yield important fossils, including dinosaur footprints. They are also of on-going interest for the study of early Cretaceous stratigraphy. These interests should be acknowledged with the assumption that geologists and the Jurassic Coast Team hosted by DCC will respond positively to any opportunities to recover fossils or record and study unusual features if they are discovered. In terms of geodiversity there is a presumption in favour of an appropriate level of quarrying activity continuing in order to sustain these on-going interests. 	<ul style="list-style-type: none"> Note potential for quarries to yield fossils or other material of geodiversity interest. Visits or other investigation of working sites may be requested. Investigate potential and/or benefits of leaving quarried face open after restoration.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	?	0	<p>Groundwater</p> <ul style="list-style-type: none"> Site overlies Principal Aquifer. No impact on Source Protection Zones. No licenced supplies. Assessment should be completed to assess the impact on the water resource and on down gradient licensed springs and receiving water course. Proposed extension overlies part of the area from which Kingston's water supply comes. 	<ul style="list-style-type: none"> Full hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality – with particular reference to protecting Kingston's water supply. Any fuel on site should be properly stored to avoid contamination in case of spillage.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0	<p>Surface Water</p> <ul style="list-style-type: none"> Surface water within approximately 500m of site boundary, to the south. 	<ul style="list-style-type: none"> Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.
5. To reduce flood risk and improve flood management.	0	0	<p>Flooding/Coastal Stability</p> <ul style="list-style-type: none"> Site is entirely in Flood Risk Zone 1, no risk of flooding. 	<ul style="list-style-type: none"> No action required.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).	-	?	<p>Archaeology</p> <ul style="list-style-type: none"> A barrow that is protected as a Scheduled Monument (Dorset M161 – ‘Barrow 1000yds (910m) SE of Kingston Barn) is a constraint to quarrying here. It occupies a location west of the proposed extension.. Historic England have considered the proposed extension and have indicated that it should be possible to identify and avoid the setting of this western barrow, thereby allowing the proposed extension. Further assessment will be required at the planning application stage to test the proposed extension boundaries, the relationship of the western barrow to others around Combe Bottom as well as other setting issues and the impact on other below-ground archaeology (the ‘Bing Maps’ aerial view of the site seems to show cropmarks of ancient field boundaries). 	<ul style="list-style-type: none"> Full archaeological survey of the area required to assess possible presence and significance of non-designated remains and to assess Monuments and establish their settings and determine how these can be fully protected during working. Settings of the Monuments to be established prior to working and not to be compromised during working. Further detail is proposed to be added to minimise impacts on the historic environment. All necessary mitigation to be implemented prior to working. Adequate provision to be made for preservation, excavation or recording, as appropriate. Further consideration to be given to restoration proposals, in terms of historic landscapes.
	-	?	<p>Historic Landscapes</p> <ul style="list-style-type: none"> The presence of the Monument and associated constraints have been discussed above. As well as being part of a landscape where quarrying has taken part in the past, the site appears to be one of a number of relatively flat locations around Combe Bottom that were chosen as locations for Bronze Age barrows. 	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
		0	0	<p>Historic Buildings</p> <ul style="list-style-type: none"> This is a quarry set in a quarrying landscape and the nearest listed buildings are too far away to be affected. No significant impact expected.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	<p>–</p> <p>– –</p>	<p>?</p>	<p>Landscape Capacity</p> <ul style="list-style-type: none"> The site is located within the Purbeck Plateau, an open coastal landscape that provides sweeping views across a predominantly undeveloped context, often incorporating characteristic geometric fields with stone boundaries, of the type that comprise the extension site itself. The proposal would have a significant adverse impact on the physical landscape, which is highly valued and protected. Proximity to the Purbeck Way and public highways are of key concerns due to visual effects and operational noise. This will result in significant adverse impacts on sensitive visual receptors and impact negatively on the tranquillity in this part of the AONB. The earthworks required would also create significant adverse impacts on the open and sloping sides of the valley above the wooded edges and actively impact on the setting of the adjacent tumuli. Therefore, despite the upper western area being in the 'Zone of Least Landscape and Visual Impact' it is felt access to this area in terms of the impact on the coombe, the rest of the eastern facing slopes and the Purbeck Way means at this scale it is not appropriate for landscape and visual reasons. 	<ul style="list-style-type: none"> Appropriate mitigation will be required; and where this is not possible, compensation will be required. The following specific issues are considered to require clarification and/or modification - they are considered in more detail in the 'Landscape Impacts' later in this site assessment: <ul style="list-style-type: none"> The length of time the quarry may remain operational Working the proposed extension, in relation to cessation of working and restoration at the current quarry Appraisal of mitigation options The issue of the tunnel referred in the Pre-Submission Consultation Draft The red line coverage, and how appropriate this is Landscape and habitat enhancement through restoration The need for compensatory environmental enhancement to offset landscape harm
	– –	?	<p>Designated Landscapes</p> <ul style="list-style-type: none"> Significant Adverse Impact – site is within Dorset Area of Outstanding Natural Beauty and Heritage Coast. 	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				<ul style="list-style-type: none"> ○ Modifications are proposed to highlight the potential for cumulative landscape and visual impacts and to ensure mitigation reduced impacts to an acceptable minimum. ○ Furthermore, it is proposed to add an additional development guideline to require timely restoration to reflect the sensitivity of the environment. ○ A further modification is proposed to restrict working within a certain area of the site where impacts are likely to be greatest.
8. To protect and improve air quality and reduce the impacts of noise.	0	0	<ul style="list-style-type: none"> • Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site. 	<ul style="list-style-type: none"> • Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	-	0	<ul style="list-style-type: none"> • Site is 'Good to Moderate' agricultural land. • Soils will be stripped and protected during preparation and working and reused on site as part of restoration. 	<ul style="list-style-type: none"> • Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
10. To conserve and safeguard mineral resources.	++	0	<ul style="list-style-type: none"> The current site provides both dimension stone (from the Portland beds) for construction or sea defence uses as we as crushed rock sold as construction aggregate. This is the only source crushed rock outside of Portland. The proposed extension would make an important contribution to the supply of crushed rock, primarily for local markets. It would serve to reduce the need for aggregate extraction elsewhere in the county. 	<ul style="list-style-type: none"> No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate and/or possible.
11. To promote the use of alternative materials.	-	0	<ul style="list-style-type: none"> Although the current site does include a recycled aggregates production facility, it is not expected that the proposed extension will also produce recycled aggregates. 	<ul style="list-style-type: none"> No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	<ul style="list-style-type: none"> Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. This site plays an important role in supplying crushed rock aggregate to Purbeck, and Bournemouth and Poole. 	<ul style="list-style-type: none"> Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	<ul style="list-style-type: none"> This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of crushed rock and dimension stone required for construction and other purposes. Both levels are expected to maintain employment, skilled and unskilled. Mineral working has the potential to negatively affect businesses in the locality, e.g. through contributing to traffic congestion, noise, visual and perception related issues. Restoration to agriculture will offer some economic benefits through both the agriculture itself and the recreational attraction and use in the wider area (i.e. riding, walking). 	<ul style="list-style-type: none"> No action required. Impacts on local businesses will be identified and mitigation during working will be applied where necessary – e.g. holding back quarry traffic during peak travel times, further screening.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
14. To adapt to and mitigate the impacts of climate change.	-	0	<ul style="list-style-type: none"> Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. 	<ul style="list-style-type: none"> Use energy efficient plant and machinery. Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	-	0	<ul style="list-style-type: none"> Access proposed is via the adequate existing Swanworth Quarry access onto the C135. From here vehicles will travel a short distance north onto the B3069 and onward to the A351 through Kingston. The proposed extension will not be worked concurrently with the existing Swanworth Quarry operations. The route passes a small number of properties on the edge of Kingston but by-passes the main part of the settlement on the B3069. This site has therefore considered to have a 'Less Significant Adverse Impact'. Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network. 	<ul style="list-style-type: none"> Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team. Transport Assessment will identify opportunities for reducing impacts on the transport network. For clarification it is proposed to clarify within the development guidelines that the extension will only be accessed through the existing quarry.
16. To support and encourage the use of sustainable transport modes, imposing no	-	0	<ul style="list-style-type: none"> The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. As far as reasonably possible negative impacts resulting from access and transport will be 	<ul style="list-style-type: none"> Mitigate impacts where identified and appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
unmitigated negative impacts on them.			mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	
17. To sustain the health and quality of life of the population	-	0	Impact on Sensitive Human Receptors <ul style="list-style-type: none"> Closest property approximately 350m to north/east; others >500m to south, Kingston Village approximately 1km to north-west. Possibility of some visibility from the north – further assessment will be required, with mitigation through screening if necessary. 	<ul style="list-style-type: none"> Provision of appropriate mitigation, following assessment of likely impacts. Restoration to improve landscape of site where possible; and to seek to facilitate public access. Screening, bunding, standoffs will be used to mitigate impacts where considered necessary. Transport impacts to be considered through Transport Assessment, as considered above.
	0	0	Impact on Existing Settlements <ul style="list-style-type: none"> Kingston Village approximately 1km to north west, Worth Matravers approximately 1km to south east. Limited if any visibility from the north, limited if any visibility from the south at Worth Matravers – site would be visible from the C135 north of Worth Matravers. Access and vehicle number would not change in intensity. 	
	0	0	Impact on Airport Safety <ul style="list-style-type: none"> Site is approximately 23 km from airport, with no wet working or restoration. No impacts expected. 	
18. To enable safe access to countryside and open spaces.	-	?	Impact on Recreational Land <ul style="list-style-type: none"> Majority of the site is agricultural land, no formal/informal recreational use. Southern part of the site (the dry coombe) appears to have informal access routes, along with a bridleway. This area links the extension to the main quarry and is unlikely to be worked, but will need to be crossed. 	<ul style="list-style-type: none"> Assessment of potential impacts, with appropriate mitigation identified. This must address impacts on the bridleway. Restoration to include considering how it might be possible to improve public access in the area.
	-	?	Impact on Public Rights of Way <ul style="list-style-type: none"> Southern part of the site appears to have informal access routes, along with a bridleway (SE11/83). This area links the extension to the main quarry and is unlikely to be worked, but will need to be crossed. 	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				<ul style="list-style-type: none"> Bridleway will be significantly affected by the proposed development, during development and working.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
<ul style="list-style-type: none"> Watercourses Ponds/lakes, including wet habitats Groundwater 	<ul style="list-style-type: none"> Potential for contamination of controlled waters (groundwater) through spillage or seepage of pollutants such as fuel. Contamination of water supplies or reduction in amount of water available for licenced supplies. 	<ul style="list-style-type: none"> Appropriate arrangements to be made for ensuring that runoff from the site does not enter the groundwater unless any silt or other pollutant has first been removed. Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. On-going monitoring during development and working of the site. 	<ul style="list-style-type: none"> Full hydrogeological risk assessment will be required as part of a planning application. Flood Risk Assessment Water Framework Assessment Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is entirely within Flood Zone 1.

Limited risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Landscape Impacts

The following issues have been raised by Natural England, with responses provided by the site promoter and the Mineral Planning Authority.

Issue	Response from Agent	Mineral Planning Authority Response
<p>1. The length of time that the quarry might remain operational appears to be based on the projected output in relation to the mineral reserve, but is the timetable realistic, given the length of time the existing quarry has been operational?</p> <p>Might the availability (or lack) of inert fill affect progress and how quickly might restoration be achieved?</p>	<p>The limestone reserves in the extension area amount to 1.7 million tonnes and would be extracted at a rate of 125,000 tonnes per year for 13 -14 years. It is expected that the duration of operations would be in region of 20 years from start to finish which gives 1-2 years for start-up and 4-5 years for restoration after stone extraction has finished.</p> <p>This time frame works as follows:</p> <ul style="list-style-type: none"> i) On the assumption that each of the three phases of stone extraction has the same time frame (4.5 years) and the same volume of limestone, each phase would contain 567,000 tonnes which would generate a voidspace of 227,000 cubic metres (2.4 tonnes/cubic metre of limestone). In backfill terms 227,000 cubic metres requires 385,000 tonnes of inert fill (1.7 tonnes / cubic metre). ii) Swanworth is able to import up to 100,000 tonnes of inert material each year, so even if we do not start infilling Phase 3 until all the stone has been removed we can restore Phase 3 in less than 4 years. iii) If the use of quarry waste is included as a potential source of restoration material, along with imported inert materials, this would shorten the time frame for restoration. iv) The existing quarry has been operated in one form or another by various different operators for almost 100 years and is approximately 60 acres (24 hectares) in extent. The extension is approximately 28 acres (11ha) and will be controlled by Suttles from day one with completion including restoration to original levels over a period of 20 years. v) Suttles have only operated the site for 7 years and are making a real effort to progress the restoration. The site is complying with its current planning permission and is on track for restoration by 2025. 	<p>The Mineral Planning Authority note the various timescales for restoration of the existing quarry and development/restoration of the proposed extension as set out by the agent.</p> <p>It appears feasible to complete the working and restoration by say 2045 at the latest - but this does depend on a number of factors, including market demand. It is also proposed to add to the Restoration Vision to ensure timely restoration. This reflects the sensitivity of the area.</p> <p>There is not considered to be any significant additional impacts from the revised estimated tonnage of 2 million tonnes.</p>
<p>2. The issue of the working of the site in relation to cessation and restoration of the existing quarry is not covered in the Policy,</p>	<p>Restoration of the current quarry</p>	<p>Modifications are proposed to highlight the potential for cumulative impacts</p>

Issue	Response from Agent	Mineral Planning Authority Response
<p>background text or the development guidelines.</p> <p>There is a potential cumulative effect on the AONB from the two sites being open simultaneously and at present there is nothing in the Plan that serves to minimise such an effect.</p> <p>In these circumstances a better definition of 'finished' is required in relation to the degree to which restoration of the existing quarry should have progressed (currently about 30% of the existing quarry seems to be restored and this proportion seems to have changed little in the last 10 years).</p> <p>Moreover, the development guidelines need to deal with the issue with a new clear and specific link between these Guidelines and Policy MS-3.</p>	<ul style="list-style-type: none"> • The existing quarry is 60 acres (24ha) in area and is being progressively restored to limestone pasture by 2025. • Around 18 acres (7ha) of the existing quarry have already been fully restored to limestone pasture. • Restoration levels are close to being achieved within a further 12 acres (5ha) of the quarry, due to be fully restored by 2020. • The final phase of quarry restoration of approximately 15 acres (6ha) will be completed during 2021-2025. <p>Cumulative Issues</p> <p>The remaining 15 acres (6ha) of the quarry contains the operational elements that would be retained for the development of the extension area including the existing processing plant and equipment, workshops, site access, weighbridge and offices. There would be no requirement to replicate or relocate these elements in the proposed extension and consequently there would be no cumulative impact as a consequence.</p> <p>The extension allocation will not result in cumulative landscape impacts because the current quarry will have finished extraction and over half of the site will be restored when the extension is progressively developed (assuming a start date of 2021 although it is difficult to predict the planning timescales).</p> <p>The current quarry has 30 acres (12ha) of extraction or processing and 12 acres (5ha) of restoration in progress. Of this 42 acres (17ha) of land, only a fraction is visible enough to cause any impact on the AONB. The extension area is 28 acres (11ha) and so even if all of the extension area was extracted without any progressive restoration (which it won't be), the acreage of quarried land will never exceed that which has been the norm for the last 20+ years.</p> <p>The entire extraction footprint of Swanworth (current and extension) will therefore never exceed around 58 acres (23.5ha) at an absolute maximum before 2025 and will be less than 40 acres (16ha) at any one time after 2025.</p> <p>It is important to note that other considerations (e.g. noise, dust, traffic) would remain at current</p>	<p>and ensure that mitigation measures should be implemented in order to minimize impacts.</p> <p>It is also proposed to add to the Restoration Vision to ensure timely restoration. This reflects the sensitivity of the area.</p>

Issue	Response from Agent	Mineral Planning Authority Response
	<p>levels (i.e. not increase cumulatively) because the processing and access will not change or the level of activity as a consequence of the extension.</p> <p>Definition of 'finished'</p> <p>Restoration of the current quarry, excluding the operational elements to be retained for the extension area, would still be completed in line with timescales of current planning e.g. by June 2025.</p> <p>A planning condition prohibiting the concurrent extraction of stone from the current quarry and the extension area (apart from the access road development) would be acceptable.</p> <p>The majority of the quarry is not visible from outside therefore it may appear that little has changed over the past 10 years, however a considerable amount of progress has been carried out infilling the large quarry void. A large part of the quarry is currently being infilled and within the next two years an additional 12 acres (5ha) will reach final restoration levels and be restored.</p>	
<p>The lack of any appraisal of possible mitigation must be addressed. Potential mitigation measures such as different screening options, phasing and early restoration should be evaluated in the Development Guidelines with appropriate corresponding changes made to Policy MS-3 as necessary.</p> <p>Mitigation considerations should include the quality and condition of landscape features which, where appropriate could be enhanced/restored. For example the restoration of walls may reduce visual impacts, creation of new walls e.g. along the northern part may serve to provide functional screening in relation to the visual receptors on the B3069.</p>	<p>Various mitigation measures are proposed, including:</p> <ul style="list-style-type: none"> • Only the lower parts of the three fields would be extracted. • Extraction will be in a sequence moving northwards to minimise visual impacts. • Progressive restoration would be undertaken of the western higher slopes (particularly the in-situ overburden slopes) at the earliest opportunity. • The creation of low small linear bunds along the northern and eastern boundaries to reinforce the existing wall, fence and hedgerow structure. These bunds are to be rough grassed and scrub and are designed not to be visually intrusive but rather reflect the character of the existing coombe slopes • A bridge using gabion basket abutments would be built to cross the Purbeck Way linking the consented quarry with the proposed extension and providing the means of access for transportation of excavated material. 	<p>Draft Plan will be amended to make clear that mitigation will be required. There is no intention to specify exactly the form this should take, although examples could be included. Modifications have been proposed to the development guidelines to ensure mitigation measures reduce impacts to an acceptable minimum.</p>

Issue	Response from Agent	Mineral Planning Authority Response
	<ul style="list-style-type: none"> • An access cut would be created which will contain vehicle movements and reflect the character of nearby coombes with its native herb/shrub/tree planting on its upper levels/slopes. • The proposed extraction area would be progressively filled to existing contours to remove completely any long term/permanent landscape or visual impact. Potential post-restoration land use is expected to be a combination of agricultural and habitat creation for nature conservation. 	
<p>The possible arrangements with the tunnel are not adequately explained anywhere in the documentation, so that it is not possible to come to a view about how a tunnel and associated bridge might affect the Area of Outstanding Natural Beauty</p> <p>The potential impact of these artificial structures on the natural qualities of the AONB must be considered.</p>	<p>The tunnel has been removed from recent submissions, and is no longer being considered. The site promoter is in the process of producing visual and engineering representations for the bridge crossing.</p>	<p>The proposal to use a tunnel has been withdrawn.</p>
<p>The red line around the proposed allocation includes a small area of about 0.6ha at the top end of the coombe situated to the east of the proposed access corridor. This comprises an east facing slope at the northern end of the coombe (the south end of this small area is touched by the Purbeck Way at the point where it changes direction before climbing the opposite side of the coombe).</p> <p>It is unclear why this area is included within the allocation site since if it were worked it would open up views into the remainder of the site. It is at a lower level so not suitable for providing screening which needs to be at the top of the slope. In these circumstances we would recommend that this area is removed.</p>	<p>The small area at the top of the coombe is not planned for extraction. It is worth highlighting that the red outline is the site allocation area, it will not be fully extracted to the red line boundary and all the mitigation screening is contained within the red outline.</p>	<p>A modification is proposed to clarify an area of the quarry where extraction won't take place.</p>
<p>One aspect of the proposal that should count in its favour is that within the allocation site at present</p>	<p>We are open to any reasonable restoration suggestion however, the matter was addressed in paragraph 4.10,</p>	<p>Text will be added to the Plan to conform with Natural England's</p>

Issue	Response from Agent	Mineral Planning Authority Response
<p>the 'natural' element of the AONB is not well represented, apart from the landform itself. There is an opportunity therefore for enhancement as part of the restoration. In general terms we support the restoration vision but have the following more detailed comments.</p> <p>(a) the objective should not just be for 'limestone pasture' but for limestone pasture of conservation interest (e.g. species-rich limestone pasture)</p> <p>(b) some areas should be left to naturally revegetate as early successional limestone habitats are particularly valuable</p> <p>(c) we do not think that new copses would be appropriate in this open landscape.</p>	<p>"The extension site is currently in agricultural use. Restoration to original ground level affords the opportunity to either revert the site to agriculture or a combination of uses including those which benefit biodiversity, geodiversity and public access (as envisaged in the restoration concept for the existing quarry – which has succeeded in creating an area of valuable species-rich limestone grassland)."</p>	<p>suggestions.</p> <p>Modifications are proposed to the Restoration Vision to address this point.</p>
<p>It is probable, and certainly it cannot be ruled out at this stage, that even with 'full mitigation' there will be residual adverse landscape and visual impacts on the AONB.</p> <p>In these circumstances Policy DM4 of the Minerals Core Strategy should apply, requiring compensatory environmental enhancements to offset the harm. Such measures may also serve to moderate detrimental effects in line with the requirements of the NPPF (115/116).</p> <p>However, at present the Plan only refers to mitigation and as such does not provide an adequate basis for provision of the necessary enhancements. The Plan should be amended to address this point through a new a specific policy requirement to this effect in MS-3 together with details about the mechanism of implementation within the Development Guidelines.</p>	<p>The site promoters are open to discussion on compensatory enhancements but the clear advantage of the current proposals is that the land will be restored to the existing landform. As it says in Section 8 Conclusion to the LVIA:</p> <ul style="list-style-type: none"> • All and any visual or landscape impacts are, in any event, temporary. The restoration of the whole proposed area to the original landform, land cover and land uses ensures this. • No landscape elements or features of any consequence are permanently lost. • There are no cumulative effects. • While there would be limited landscape impacts on the AONB and visual impacts limited to very restricted viewpoints in the AONB these would be temporary. 	<p>Text will be added to the Plan regarding the need for compensation. An additional development guideline is proposed to address this issue.</p>

Possible Timescales:

Restoration status of the current quarry of 60 acres:

- 18 are fully restored
- 12 are almost finished, due to complete by 2020
- 15 are still under extraction, due to complete 2021-2025
- 15 will remain unrestored, used for processing etc. and will be needed for the proposed extension

Current quarry to be restored by 2025.

The proposed extension could begin c. 2021/2022;

If the extension started 2022, and was ready to extract by 2024, the first phase could be complete 2028/9 - by this time, restoration of all but the operational 15 acres of the current quarry would be complete, and all incoming inert waste could be used on the proposed extension

Second phase of extension 2029 to 2034, meanwhile restoration ongoing on first phase

Third phase 2035 to 2039/2040, while restoration of second phase ongoing - with restoration of the extension by 2044/45

Cumulative Impacts

Site nomination comprises an extension of an existing quarry in an area where there is a concentration and long history of mineral extraction. The site is an extension of an existing quarry and will not be developed until the existing operation is completed. No traffic related impacts are expected, but in landscape terms the impact of the proposed extension could be an intensification over the existing operation. Further assessment is on-going to determine whether impacts can be mitigated.

There could be cumulative visual/landscape impacts, taking into account the current site and how much of that is restored.. This should be addressed at the stage of the planning application. Full visual impact assessment will be required, to identify impacts and mitigation. **The potential for cumulative impacts is proposed to be highlighted within the development guidelines. With clarification that mitigation should reduce impacts to an acceptable minimum.**

There are no sites allocated for major development in the Purbeck Local Plan Part 1 (adopted Nov 2012) within 5 km of the proposal.

The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.

NB: Further work has been undertaken on cumulative impacts for all sites. This information is presented in a separate document that should be read alongside this report. This indicates there is potential for cumulative effects in relation to biodiversity; human health; water; air/dust; climate/GHGs; cultural heritage (archaeology); landscape and amenity. Impacts are expected to be primarily during preparation/working, i.e. short to medium term; however, some such as landscape will continue until restoration is complete and the site is restored to ground level. This would also affect factors such as amenity of residents and visitors. Noise and visual impacts would also continue during restoration.

There is potential for in-combination effects between human health, landscape and amenity, with all being affected during the working of the site. Landscape impacts that cannot be satisfactorily mitigated will require appropriate compensation, as noted in the DGs. Compensation could benefit human health and amenity as well.

The DGs require cumulative impacts to be taken into consideration. The MPA is satisfied that identified impacts can be addressed by DGs and existing/proposed policy.

Viability

As an extension to an existing operational site, viability is not considered to be an issue. The site will use existing processing facilities, road access and serve existing markets, and therefore these do not have to be provided.

Heritage Impacts

There are a number of scheduled monuments in the vicinity, including one, a barrow, within 130m of the proposed extension. There are other barrows in the vicinity, which must be considered (along with their settings) in combination with each other. The impact the development of the site would have on the setting of these assets, and the considerable weight to be given to any harm to the setting of these assets, must be carefully considered against the public and other benefits of aggregate production.

Policy/Legislative Background

The Historic England website notes:

When making a decision on all listed building consent applications or any decision on a planning application for development that affects a listed building or its setting, a local planning authority must have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. Preservation in this context means not harming the interest in the building, as opposed to keeping it utterly unchanged.

This obligation, found in sections 16 and 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, applies to all decisions concerning listed buildings.

*The recent Court of Appeal decision in the case of Barnwell vs East Northamptonshire DC 2014(2) made it clear that in enacting section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 (1) Parliament's intention was that **'decision makers should give "considerable importance and weight" to the desirability of preserving the setting of listed buildings' when carrying out the balancing exercise**.*

Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (" the 1990 Act ") provides:

"(1) In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses."

Section 72 of the 1990 Act provides:

"(1) In the exercise, with respect to any buildings or other land in a conservation area, of any of the provisions mentioned in sub-section (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.

(2) The provisions referred to in sub-section (1) are the planning Acts ..."

A finding of harm to the setting of a listed building is a consideration to which the decision-maker must give "considerable importance and weight" (The Bath Society v Secretary of State for the Environment [1991] 1 W.L.R. 1303, per Glidewell LJ at 1319; and see East Northamptonshire District Council v Secretary of State for Communities and Local Government [2015] 1 W.L.R. 45 , per Sullivan LJ at [22]–[23] and [29]).

The relevant policies of the National Planning Policy Framework are paragraphs 128–135, the material parts of which provide:

"128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance...

129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise...

131. In determining planning applications, local planning authorities should take account of:

“the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; ...”

132. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation. The more important the asset, the greater the weight should be ...

133. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply: ...

134. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

135. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset.”

The National Planning Policy Framework (paragraph 144) also states:

When determining planning applications, local planning authorities should:

- give **great weight** to the benefits of the mineral extraction, including to the economy;

Commentary

In considering the potential development of the Swanworth Quarry site, with acknowledged impacts on a designated heritage asset, the following points have been taken into consideration.

- There is “a strong presumption against harm to designated assets” (Barnwell [2014] EWCA Civ 137; Forge Field [2014] EWHC 1895 (Admin))
- “Considerable weight” must be given to harm to designated assets, however slight, if more than de minimis (Barnwell; Forge Field; Jones [2015] EWCA Civ 1243)
- *Mordue v Secretary of State for Communities and Local Government and others* [2015] EWCA Civ 1243. Heritage assets have statutory protection, unlike other material considerations; and the NPPF has a complex template for their consideration. Both must be considered in an assessment.
- Failure to assess alternative sites on appropriate public interest criteria (Forge Field; ENV4)
- The policy presumption in favour of sustainable development does not apply to cases of harm to designated assets (Gladman [2016] EWHC 421 (Admin))
- Cumulative effects must be considered (PPG)
- All recognised harm must be included in the recommended Planning balance (Barnwell)
- Undue weight should not be given to the temporary nature of development (National Wind Power [1999] N.P.C. 128)

Development of the site would not cause substantial harm to the heritage assets, but would have an impact on their setting. Development of the site would result in temporary harm to the setting of the heritage assets - this would be ‘less than substantial’ harm, for a temporary period. This harm has been given great and considerable weight in this assessment.

A range of sites nominated for allocation in the Mineral Sites Plan for sand and gravel quarries have been assessed on heritage grounds and on a range of other grounds. A number have been rejected for reasons other than heritage issues. The remaining sites have been included in the Draft Mineral Sites Plan.

The proposal is for a temporary period, after which the site will be restored and the impact on the heritage assets setting will be removed.

The Heritage Impact Assessment that would be carried out as part of any planning application would identify the setting of the heritage assets and would identify appropriate mitigation to offset the harm to the setting resulting from development of the site to a level that would allow the development to go ahead.

It is expected that the mitigation would be a combination of screening (an earth bund) and a standoff/buffer. **Further details on mitigation has been proposed as a modification to the Plan.**

If mitigation is not possible, or if the necessary standoff was such that it made the site uneconomic to develop, then the development would not go ahead.

In considering potential impacts and mitigation, it must be remembered that this is not a planning application, but a nomination for allocation of a site in the Mineral Sites Plan. The evidence required and level of assessment carried out at this stage are considered to be proportionate and appropriate. At the planning application stage a detailed Heritage Impact Assessment on the assets and their settings will be carried out, as part of an Environmental Impact Assessment, and the appropriate mitigation identified and applied.

At the current stage, the Mineral Planning Authority is considering whether the proposed nomination can reasonably be allocated through the Mineral Sites Plan, on the understanding that appropriately detailed assessment work will be carried out at a later date, and appropriate mitigation applied.

Although inclusion in an adopted plan gives a site allocation greater weight and likelihood of development, it is not deemed planning permission. Any allocation in an adopted plan still needs to go through the full planning application process, including Environmental Impact Assessment, and if impacts are identified that cannot be satisfactorily mitigated, the proposal will not receive permission.

It is considered, taking into account:

- the less than substantial harm to the setting of the scheduled monuments;
- the great and considerable weight given to such harm, and the strong presumption against such harm;
- the temporary nature of the harm
- the great weight to be given to the provision of mineral
- the fact that minerals must be worked where they are found
- the fact that this is an extension site, and the processing plant and other infrastructure is already available
- the fact that the proposed development will be subject to planning application including Environmental Impact Assessment, and impacts on the setting will be assessed in detail and appropriate mitigation identified

that the public benefit to be received from this proposed development, and the nature and duration of the development causing harm, together with the scope for mitigating this harm, are such that the site should be allocated in the Mineral Sites Plan.

Summary.

Potential Benefits	Potential Impacts
<ul style="list-style-type: none"> • Provision of some dimension stone and armour stone – latter has benefits in coastal protection. • Reduction in impacts of agriculture on the SAC to the south. Other benefits to biodiversity from removing the land from agriculture, either temporarily or permanently. • If a dry coombe restoration approach is used, this will provide further benefits. • Geodiversity benefits, through exposures created and fossils found. • Restoration to offer improved public access. • Provision of crushed rock aggregates – in a location away from Portland - required for maintenance and construction of the built environment. • Provision of aggregate to support the local and wider economy, with accompanying benefits to the economy. 	<ul style="list-style-type: none"> • Significant impacts on the Scheduled Monument(s) and settings and on other archaeological features – full assessment of impacts required, with all necessary mitigation identified. Historic England to agree proposed mitigation. Mitigation is proposed as a modification to the Plan. • Significant landscape issues, through impacts on the dry coombe, views from south/west and on Area of Outstanding Natural Beauty and Heritage Coast. Full assessment of impacts required, with all necessary mitigation identified. • Significant impacts on bridleway south and east of site. Further assessment required to consider how this can be mitigated. • A full Transport Assessment with impacts and mitigation identified will be required. • Assessment of possible impacts on surrounding sensitive receptors (residences, settlements) with full mitigation identified.

Overall Recommendation:

This is a proposed extension of the existing Swanworth Quarry. Appraisal has identified a number of both benefits and impacts that are likely to result from its development.

The key benefit is reduced transport impacts making the proposed extension, on this basis, a more sustainable option than the alternatives, Portland and Somerset.

However, there are significant landscape impacts, as the proposed extension is within both the Dorset Area of Outstanding Natural Beauty and the Heritage Coast.

The Mineral Planning Authority consider the benefits of maintaining a supply of crushed rock in a relatively sustainable location to serve the Bournemouth and Poole market are enough to justify the inclusion of the proposed site in the Draft Mineral Sites Plan, for debate and consideration through Examination.

On balance, the Mineral Planning Authority are of the opinion that it appears reasonable on the basis of evidence available and the assessment undertaken to date to consider including this site in the emerging Mineral Sites Plan and to discuss its inclusion at the Examination Hearings, inviting the Inspector's view on its ultimate inclusion or exclusion.

Updated Recommendation (February 2019)

A series of additional development guidelines are proposed as modifications to the Plan. These modifications provide additional details regarding mitigation that will reduce the impacts of working. The increased estimated reserve is not expected to have a significant increased impact on the original proposal. The site therefore remains appropriate for allocation in the Bournemouth, Dorset and Poole Mineral Site Plan.

Recycled Aggregates: RA01 Whites Pit, Poole (February 2019)

Site Name/Location: RA01 Whites Pit, Poole Proposed development: It is an existing operation	Nominee/Agent: Land and Mineral Management Local Authority: Borough of Poole
Site Area: approximately 6 ha	Capacity: up to 250,000 tpa;

Impact Assessment Scoring

-	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain
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Timescales for effects:

P/W: Preparation and Working

R/A: Restoration and Afteruse

N.B. the proposal seeks a permanent or long-term approval for recycled aggregate production, so restoration/afteruse has not been considered.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	++	N/A	<ul style="list-style-type: none"> Use of a washing plant permits the recycled product to be applied to higher specification uses and reduces the amount of material ultimately requiring landfill. 	<ul style="list-style-type: none"> No action required.
	0	N/A	<p>European/International Designations</p> <ul style="list-style-type: none"> No likely effects identified. 	<ul style="list-style-type: none"> No action required.
2. To maintain, conserve and enhance biodiversity	0	N/A	<p>Annex 1 Bird Species</p> <ul style="list-style-type: none"> Probably no significant impact, but more information is required to determine the effect on Annex 1 Nightjar who are known to forage north from Canford Heath towards the Stour River and may cross this site. 	<ul style="list-style-type: none"> Further assessment required, along with any mitigation that may be necessary. Aggregate recycling operation is currently in operation on the site, so unlikely to be significant effects identified.
	0	N/A	<p>National Designations</p> <ul style="list-style-type: none"> No likely effects identified. 	<ul style="list-style-type: none"> No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	N/A	Protected species <ul style="list-style-type: none"> No likely effects identified. 	<ul style="list-style-type: none"> No action required.
	0	N/A	Local recognitions/designations, including ancient woodland and veteran trees <ul style="list-style-type: none"> No likely effects identified. 	<ul style="list-style-type: none"> No action required.
3. To maintain, conserve and enhance geodiversity.	0	N/A	<ul style="list-style-type: none"> No likely effects identified. 	<ul style="list-style-type: none"> No action required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	-	N/A	Groundwater <ul style="list-style-type: none"> Site overlies secondary aquifer. Not within any Source Protection Zone designation. Licensed abstraction sites in proximity, any possible impacts to be appropriately mitigated. 	<ul style="list-style-type: none"> Further assessment on possible impacts on water supplies and appropriate mitigation if potential impacts identified. Detailed pollution prevention management plan detailing best practices to minimise pollution incidents, as well as measures that will be taken should a pollution event occur. Appropriate arrangements should be put in place to ensure that the water leaving the site is of an acceptable quality. Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse. An appropriate surface water management scheme would need to be provided at the planning application stage. It is proposed to add an additional development guideline to clarify that surface drains exist in the vicinity of the site. This must consider both surface water flow within and off the site, and also take into account water quality issues by incorporating appropriate pollution prevention measures.
	0	N/A	Surface Water <ul style="list-style-type: none"> Water quality issues may arise from the contaminated land beneath the site, or from the construction/operation of the recycling centre. All these issues must be considered in the design and management of the proposed development. 	
5. To reduce flood risk and improve flood management.	0	N/A	Flooding/Coastal Stability <ul style="list-style-type: none"> Entire site is within Flood Risk Zone 1, no expected risk of flooding or contributing to flooding. 	<ul style="list-style-type: none"> Flood Risk Assessment (FRA) will be required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				<ul style="list-style-type: none"> All necessary mitigation to be implemented.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).	0	N/A	Archaeology <ul style="list-style-type: none"> Since this area has been quarried and landfilled in restoration, provided that works only take place within the existing worked/restored area, there should not be a significant impact. The only way there could be significant archaeological impact would be if there were associated works outside the previously-quarried areas, or if the works had a significant visual impact on several Bronze Age barrows if the vicinity that are protected as Scheduled Monuments. 	<ul style="list-style-type: none"> No further action required at this stage, tumuli referred to are unlikely to be affected by the proposed development. Site is already an existing aggregate recycling operation.
	0	N/A	Historic Landscapes <ul style="list-style-type: none"> Since this area has been quarried and landfilled in restoration, provided that works only take place within the existing worked/restored area, there should not be a significant impact. 	<ul style="list-style-type: none"> No action required.
	0	N/A	Historic Buildings <ul style="list-style-type: none"> No impacts on any listed buildings or settings of any listed buildings. 	<ul style="list-style-type: none"> No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	0	N/A	Landscape Capacity <ul style="list-style-type: none"> Landscape capacity to accommodate the development is high, provided it is co-ordinated and designed in with the restoration of the remainder of the area. 	<ul style="list-style-type: none"> Given the fact that the site is currently operating as an aggregate recycling operation, no impacts are expected and no further actions required at this stage.
	0	N/A	Designated Landscapes <ul style="list-style-type: none"> No impact on any designated landscapes. 	
8. To protect and improve air quality and reduce the impacts of noise.	0	0	<ul style="list-style-type: none"> Impacts on air quality expected to be negligible. No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. 	<ul style="list-style-type: none"> Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<ul style="list-style-type: none"> Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site. 	
9. To maintain, conserve and enhance soil quality.	0	N/A	<ul style="list-style-type: none"> Site is an existing aggregate recycling operation, located on land previously quarried and landfilled in restoration. No further impacts on soil quality are expected. 	<ul style="list-style-type: none"> No action required.
10. To conserve and safeguard mineral resources.	++	N/A	<ul style="list-style-type: none"> Site is an existing aggregate recycling operation, located on land previously quarried and landfilled in restoration. There are no further mineral resources in the ground to protect. As a producer of recycled aggregates, this site will serve to conserve resources of primary aggregates elsewhere and reduce the need to quarry these aggregates. 	<ul style="list-style-type: none"> No action required.
11. To promote the use of alternative materials.	++	N/A	<ul style="list-style-type: none"> When amalgamated with the nearby recycling operation including washing plant, site will be the largest recycled aggregate production site in Bournemouth, Dorset and Poole. It will produce washed/recycled aggregate, making it a more flexible product capable of substitution in a wider range of uses. 	<ul style="list-style-type: none"> No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	++	N/A	<ul style="list-style-type: none"> Development of this site would provide a benefit in making an important contribution to the provision of a supply of recycled aggregate to meet society's needs for aggregate and delay the rate of quarrying of primary aggregate. This contribution to a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective. 	<ul style="list-style-type: none"> Ensure principles of sustainable development are incorporated into the development of this site.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
13. To promote and encourage sustainable economic growth	+	N/A	<ul style="list-style-type: none"> This site proposal is expected to contribute to economic development in two main ways – directly through the provision of employment at the site to be developed and indirectly through the provision of (recycled) aggregate minerals required for the maintenance of built environment and for new built development. Both are expected to maintain/provide employment, skilled and unskilled. Given the expected level of production from this site expected size of the reserve this is likely to be a limited benefit. 	<ul style="list-style-type: none"> Ensure principles of sustainable development are incorporated into the development of this site.
14. To adapt to and mitigate the impacts of climate change.	+	N/A	<ul style="list-style-type: none"> The further development and continued operation of this site is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. There will be benefits in reducing the amount of new quarrying of land needed. 	<ul style="list-style-type: none"> The use of energy efficient plant and machinery will assist in reducing climate change impacts.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	0	N/A	<ul style="list-style-type: none"> The site is an existing aggregate recycling operation and the proposed development, already with a 7 year temporary permission, is to amalgamate another aggregate recycling operation within the nearby complex into the current site. Access is from an A-Road via signalised junction and private haul road. Congestion occurs at both Gravel Hill Junctions and Bear Cross Roundabout. Additional LGV traffic would have a disproportionate effect on queuing in peak periods, but the proposal is not expected to generate additional traffic. Both the currently separate sites have the same access onto the public road system, and no increase or decrease in traffic levels bringing materials in and taking product away is expected following amalgamation. 	<ul style="list-style-type: none"> No further action required at this stage.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<ul style="list-style-type: none"> Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network. 	
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	-	N/A	<ul style="list-style-type: none"> The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy. 	<ul style="list-style-type: none"> Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	0	N/A	<p>Impact on Sensitive Human Receptors</p> <ul style="list-style-type: none"> Site is existing aggregate recycling site, well screened by existing landform and existing trees. No visual impacts expected, or noise/dust impacts. No increase in levels of traffic using the site expected and no new access proposed. 	<ul style="list-style-type: none"> No further action required at this time.
	0	N/A	<p>Impact on Existing Settlements</p> <ul style="list-style-type: none"> Site is existing aggregate recycling site, well screened by existing landform and existing trees. No visual impacts expected, or noise/dust impacts. No increase in levels of traffic using the site expected and no new access proposed. 	
	0	N/A	<p>Impact on Airport Safety</p> <ul style="list-style-type: none"> Site is approximately 7 km from the airport, but there will be no wet working or restoration. No negative impacts expected. 	<ul style="list-style-type: none"> No further action required at this time.
18. To enable safe access to countryside and open spaces.	0	N/A	<p>Impact on Recreational Land</p> <ul style="list-style-type: none"> Site is currently used for recycled aggregate production and does not include any land used for recreational purposes. No impacts expected. 	<ul style="list-style-type: none"> No further action required at this time.
	0	N/A	<p>Impact on Public Rights of Way</p> <ul style="list-style-type: none"> No public rights of way cross the site or run near the site. No impacts expected. 	<ul style="list-style-type: none"> No further action required at this time.

Preliminary Hydrological Risk Assessment

It is noted that the proposed already has a temporary permission and thus the comments made below may not be relevant at this time. The site is some 1.75km from the Stour and drains into the Stour.

The Environment Agency notes that an appropriate surface water management scheme would need to be provided at the planning application stage. This must consider both surface water flow within and off the site, and also take into account water quality issues by incorporating appropriate pollution prevention measures. These water quality issues may arise from the contaminated land beneath the site, or from the construction/ operation of the recycling centre. Therefore all aspects must be considered in the design and management.

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
<ul style="list-style-type: none"> • Watercourses • Ponds/lakes, including wet habitats • Groundwater 	<ul style="list-style-type: none"> • The River Basin Management Plan South West River Basin District identifies the Stour as being of 'poor' environmental quality in this area. Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies. • Impacts on or removal of surface water features. 	<ul style="list-style-type: none"> • Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Stour or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. 	<ul style="list-style-type: none"> • Prior written Land Drainage Consent may be required from the Lead Local Flood Authority (LLFA), Dorset County Council in this case) for works that could affect the flow of any ordinary watercourse. • Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Cumulative Impacts

In itself, the proposed development is not expected to cause any additional/cumulative impacts and as noted already the development already has a time-limited permission.

The proposal is within 5Km (by road) of Kinson District Centre, Bournemouth where housing, employment and retail development (supermarket and small retail units) will be permitted in accordance with Policies CS9 and CS10 of the Bournemouth Local Plan: Core Strategy (adopted October 2012) (Site details not available). Traffic arising from the new development will add to general traffic levels on the A341.

NB: further work has been undertaken to cumulative impacts for all sites. This information is presented in a separate document that should be read alongside this report. This indicates that there is potential for cumulative effects in relation to air/noise and climate/GHGs.

Impacts will occur while site is operation. As a currently permitted site, the MPA is satisfied that identified impacts can be satisfactorily addressed by DGs and existing/proposed policy. No in-combination effects between receptors are expected.

Summary

Potential Benefits	Potential Impacts
<ul style="list-style-type: none"> • Provision of washed/graded recycled aggregates, offering an alternative to the quarrying/use of primary aggregates. • Use of a washing plant allows the recycle to be specified for higher end-uses. • Production and use of recycled aggregate has benefits in limiting the amount of land-won aggregate that has to be produced. What is produced can be used in the most appropriate ways/uses. • No intensification of traffic is expected. Traffic movements between the currently separate operations will be reduced. 	<ul style="list-style-type: none"> • The main impacts expected are the use of equipment of site, and transportation of material to/from the site, contribution to climate change impacts. These are expected to be minimal.

Overall Recommendation:

This is an existing facility, operating under an existing, although temporary, planning permission.

The proposed development offers many benefits and has limited impacts.

On balance, it appears reasonable on the basis of evidence available that the impacts identified in this sustainability appraisal are capable of satisfactory mitigation and the site proposed for the location of this consolidation of two separate operations can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Updated Recommendation (February 2019)

Additional development guidelines are proposed as modifications to the Mineral Sites Plan. These modifications provide additional details regarding the need for an Aviation Impact Assessment and Surface Water and should provide additional safeguards should an application for permanent consent be considered. The site therefore remains appropriate for allocation in the Bournemouth, Dorset and Poole Mineral Sites Plan.

Ball Clay: BC04 Trigon Hill Extension (February 2019)

A modification is proposed to remove this site from the Plan following grant of planning permission.

Site Name/Location: BC04 Trigon Hill Extension		Nominee: Imerys	
Mineral Type: Ball Clay		Local Authority: Purbeck District Council	
Site Area: approximately 27 ha	Production: c. 100,000 tpa;	Reserve: approximately 1,200,000 tonnes	

Impact Assessment Scoring

-	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain
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Timescales for effects:

P/W: Preparation and Working

R/A: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	N/A	N/A	<ul style="list-style-type: none"> This Objective is not relevant to this site nomination 	<ul style="list-style-type: none"> N/A
2. To maintain, conserve and enhance biodiversity	?	0	<p>European/International Designations</p> <ul style="list-style-type: none"> Proposed area lies just to the south of an area of European heathland. At this stage, without detailed analysis of possible impacts, it is not clear whether there would be any likely significant effect of mineral working on the designated area. In order to be acceptable the development proposal would have to pass the tests in the Habitats Regulations. In principle it should be possible to avoid effects on the designated sites through an appropriate stand-off from the development. 	<ul style="list-style-type: none"> Ecological surveys and hydrological reports required, with appropriate mitigation. Appropriate assessment under the Habitat Regulations will be required. To reflect the HRA Screening an additional development guideline is proposed to be added. This will provide additional protection to European sites. Heathland restoration and public access could be created

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				following working. An additional development guideline is proposed to ensure phased working to ensure restoration of high quality heathland/acid grassland habitat.
	- ?	0	<p>Annex 1 Bird Species</p> <ul style="list-style-type: none"> Area could support Annex 1 birds as part of the existing forestry crop rotation. Clearance of trees would be likely to result in heathland regeneration and the open habitat would rapidly become suitable for more Annex 1 birds. The site has the potential to be included in a revision to the heathland SPA boundary. Risk based approach essential here. 	<ul style="list-style-type: none"> Ecological surveys and hydrological reports required, with appropriate mitigation. Appropriate assessment under the Habitat Regulations will be required. Heathland restoration and public access to be created.
	-	0	<p>National Designations</p> <ul style="list-style-type: none"> Proposed area lies just to the south of an area of Morden Bog and Hyde Heath SSSI. At this stage, without detailed analysis of possible impacts, it is not clear whether there would be any likely significant effect of mineral working on the designated area. In principle it should be possible to avoid effects on the designated sites through an appropriate stand-off from the development. 	<ul style="list-style-type: none"> Ecological surveys required, with appropriate mitigation. Restoration to include creation of invertebrate habitat.
	-	0	<p>Protected species</p> <ul style="list-style-type: none"> There are numerous bat records from Trigon Hill Plantation suggesting the plantation or trees in the area may provide important roosting habitats; assessment will be required to understand the implications of removal of the plantation on bats. A large badger sett is also known in the plantation and the effects of working on this species would also require assessment. 	<ul style="list-style-type: none"> Ecological surveys required, with appropriate mitigation identified. Restoration to include appropriate habitats for these species. Further investigation into likelihood of grant of disturbance licences.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<ul style="list-style-type: none"> It is difficult to assess whether mitigation on bats or badger would be acceptable without detailed study on population sizes and locations. 	
	0	0	<p>Local recognitions/designations, including ancient woodland and veteran trees</p> <ul style="list-style-type: none"> No likely effects identified. 	<ul style="list-style-type: none"> No action required.
3. To maintain, conserve and enhance geodiversity.	+	0	<ul style="list-style-type: none"> Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration. 	<ul style="list-style-type: none"> Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	?	0	<p>Groundwater</p> <ul style="list-style-type: none"> No impact on any Source Protection Zones. Site overlies a Secondary Aquifer. Possible implications of adjacent landfill, including leachate migration to be considered/assessed. Assessment required to determine possible impacts on hydrogeology, including considering possible hydraulic links with adjacent nature conservation designations. Impacts to be appropriately mitigated 	<ul style="list-style-type: none"> Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. Where necessary mitigating measures should be installed to maintain groundwater levels. Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. Any fuel on site should be properly stored to avoid contamination in case of spillage. Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	-	0	<p>Surface Water</p> <ul style="list-style-type: none"> Watercourse within the site boundary. There appears to be a pond close to the northern edge of the site and other ponds in vicinity. Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated 	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
5. To reduce flood risk and improve flood management.	0	0	<p>Flooding/Coastal Stability</p> <ul style="list-style-type: none"> Entire site is within Flood Risk Zone 1, no expected risk of flooding or contributing to flooding. 	<ul style="list-style-type: none"> Flood Risk Assessment (FRA) will be required. All necessary mitigation to be implemented.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).	-	0	<p>Archaeology</p> <ul style="list-style-type: none"> The number of prehistoric barrows in the area in particular indicates that the site has archaeological potential. There is a Scheduled Monument – a barrow – to the south-west of the site. Part of the setting of this barrow has already been lost. Development of the proposed site is likely to have an impact on the remaining setting area. Any harm is given great weight in the assessment. Archaeological assessment and evaluation is required. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from Very Significant to No Significant impact. 	<ul style="list-style-type: none"> Full archaeological survey of the area required to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working. All necessary mitigation to be implemented. Adequate provision to be made for preservation, excavation or recording, as appropriate. Further consideration to be given to restoration proposals, in terms of historic landscapes. A series of additional development guidelines are proposed to mitigate impacts or reduce them to non-significant levels. It is also proposed to include an additional development guideline to provide details on the restoration scheme in the
	-	+	<p>Historic Landscapes</p> <ul style="list-style-type: none"> Historically much or all of this site would have been heathland. This heathland formed part of the setting of the barrows in the area. Unsympathetic extraction and quarrying could have a negative impact on the setting of these Monuments, but there is the potential for an improvement in that setting through restoration to heathland. Further evaluation will be required. When this has been undertaken possible impacts, if any, will be better understood. 	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				context of the Trigon Hill Barrow.
	0	0	Historic Buildings <ul style="list-style-type: none"> Belts of trees separate Trigon House, which is the nearest listed building to the site. Therefore the site has negligible impact on the listed buildings. 	<ul style="list-style-type: none"> No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	-	0	Landscape Capacity <ul style="list-style-type: none"> Potential to impact adversely on the open access land to the west and north west. Due to its position on the west slopes of the hillside its sensitivity is increased and its capacity to absorb development is significantly reduced. 	<ul style="list-style-type: none"> Assessment of potential visual impacts required. All appropriate mitigation to be identified and implemented. A modification is proposed to clarify that proposals must mitigate landscape impacts or reduce them to non-significant levels. Restoration to consider increasing public access/informal recreation and to include nature conservation interests. Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
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	-	0	Designated Landscapes <ul style="list-style-type: none"> Less significant adverse impact. 	<ul style="list-style-type: none"> No action required.
8. To protect and improve air quality and reduce the impacts of noise.	-	0	<ul style="list-style-type: none"> Impacts on air quality at/around the site expected to be negligible. Any dust resulting from working will be controlled through normal dust-suppression measures. Ball clay traffic travelling to/from Devon along the A35 would have some impact on the Chideock AQMA. Any impacts due to noise resulting from mineral working would be expected to be satisfactorily minimised through normal noise mitigation 	<ul style="list-style-type: none"> Environmental protection measures to be put in place to reduce dust and noise impacts. Existing measures to address air quality in Chideock AQMA would minimise impacts due to ball clay transport.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			measures, imposed at the planning application stage.	
9. To maintain, conserve and enhance soil quality.	-	0	<ul style="list-style-type: none"> The site comprises primarily heathland, grassland and woodland cover. The area is a former heathland area and so would be expected to have relatively poor, acidic soils. Site preparation/working would require stripping and storage of the soils, with some impacts on them. If the site is worked and restored to heathland this will require reinstatement/retention of acidic soils with their seedbank. 	<ul style="list-style-type: none"> Soil is poor quality in agricultural terms but valuable in terms of potential for heathland restoration. Soils to be stored/protected during preparation and working and properly reinstated during restoration.
10. To conserve and safeguard mineral resources.	++	0	<ul style="list-style-type: none"> The site would make an important contribution to the supply of ball clay. 	<ul style="list-style-type: none"> No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	0	0	<ul style="list-style-type: none"> This proposal does not at present promote the use of alternative materials. 	<ul style="list-style-type: none"> No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	<ul style="list-style-type: none"> Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective. 	<ul style="list-style-type: none"> Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	<ul style="list-style-type: none"> This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of ball clay and aggregate minerals required for the maintenance of built environment and for new built development and for commercial/industrial uses. 	<ul style="list-style-type: none"> Impacts away from the site will be identified as part of any planning application and mitigation during working will be applied where necessary – e.g. holding back

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<ul style="list-style-type: none"> Both levels are expected to maintain employment, skilled and unskilled. However given the expected size of the reserve this is likely to be a limited benefit. Mineral working has the potential to negatively affect businesses in the locality, e.g. through contributing to traffic congestion on the C7, noise, visual and perception related issues. Proposed restoration is to heathland/agriculture, both of which offer economic benefits. 	<p>quarry traffic during peak travel times, further screening.</p> <ul style="list-style-type: none"> Further assessment required to consider restoration options.
14. To adapt to and mitigate the impacts of climate change.	-	0	<ul style="list-style-type: none"> Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small. 	<ul style="list-style-type: none"> Use energy efficient plant and machinery. Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	-	0	<ul style="list-style-type: none"> This proposal is for an extension to existing ball clay extraction at Trigon Hill. This is an established site with a good access onto Wareham Forest Road. Access from here to the strategic network is gained via the A35 to the north and the A351 to the east. The extension site could be expected to generate 55 trips per day although it is thought that the site would follow the cessation of other extraction at Trigon rather than operating in parallel to it. The site has therefore been given a 'Less Significant Adverse Impact' rating. Should the site intensify movements to Trigon Hill any Transport Statement should consider vehicle routing and any impact on the A351 to the east which experiences high levels of congestion. 	<ul style="list-style-type: none"> Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team. Transport Assessment to be carried out, identifying opportunities for

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<ul style="list-style-type: none"> • Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network. 	<p>reducing impacts on the transport network.</p> <ul style="list-style-type: none"> • Alternative options to be investigated. • An additional development guideline is proposed to highlight the potential for cumulative impacts resulting from this proposal and others in the vicinity. Opportunities for minimising these impacts are required to be considered.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	-	0	<ul style="list-style-type: none"> • The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy. 	<ul style="list-style-type: none"> • Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	?	0	<p>Impact on Sensitive Human Receptors</p> <ul style="list-style-type: none"> • Cold Harbour properties some 380 m to the east, other residential uses further to the north. • Development would likely require appropriate mitigation (such as visual and noise attenuation bunding, standoffs) to limit impacts. • Adequate scope to screen works, using mitigation such as visual and noise attenuation bunds. 	<ul style="list-style-type: none"> • Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible;

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	?	0	<p>Impact on Existing Settlements</p> <ul style="list-style-type: none"> • Cold Harbour is closest settlement to the east along with other properties along the C7. • Screening (visual and noise attenuation bunding) would significantly limit the impact of the site working, but there will be impacts of lorries entering/leaving the site. This is an extension and should not result in intensification of any impacts. 	<p>and to seek to increase public access.</p> <ul style="list-style-type: none"> • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network where appropriate. • An additional development guideline is proposed to highlight the potential for cumulative impacts resulting from this proposal and others in the vicinity. Opportunities for minimising these impacts are required to be considered.
	0	0	<p>Impact on Airport Safety</p> <ul style="list-style-type: none"> • Site is approximately 23 km from airport and proposed for dry working and restoration. • No impacts expected 	<ul style="list-style-type: none"> • No action required.
18. To enable safe access to countryside and open spaces.	0	?	<p>Impact on Recreational Land</p> <ul style="list-style-type: none"> • Site is agricultural land and forestry, private land with no public access. No formal or informal recreational use. • No impacts expected. Restoration to consider options for improving public access in the area. 	<ul style="list-style-type: none"> • No action required for working. • Restoration to improve public access in the area.
	0	0	<p>Impact on Public Rights of Way</p> <ul style="list-style-type: none"> • No rights of way across the site or adjacent to it. • No impacts expected 	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
<ul style="list-style-type: none"> Watercourses Ponds/lakes, including wet habitats Groundwater 	<ul style="list-style-type: none"> The River Basin Management Plan South West River Basin District identifies the Piddle (the closest main river, some 900m distant) as being of 'Poor' environmental quality. Potential for contamination from runoff from site. Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. Potential impacts on existing surface water features. 	<ul style="list-style-type: none"> Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Piddle or groundwater unless any silt has first been removed. Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. On-going monitoring during development and working of the site. Ground water recharge if considered necessary. 	<ul style="list-style-type: none"> Full hydrogeological risk assessment will be required as part of a planning application. Flood Risk Assessment Water Framework Assessment Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. Assessment of the feasibility of relocating ponds and associated habitats and species. Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is entirely within Flood Zone 1.

Limited risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Heritage Impacts

There is a Scheduled Monument adjacent to the southern/eastern part of the site. Its setting has already been affected by previous quarrying, and development of the current site will cause further harm to the setting of the barrow.

This harm must be given great and considerable weight and must be carefully considered against the public and other benefits of aggregate production.

Policy/Legislative Background

The Historic England website notes:

When making a decision on all listed building consent applications or any decision on a planning application for development that affects a listed building or its setting, a local planning authority must have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. Preservation in this context means not harming the interest in the building, as opposed to keeping it utterly unchanged.

This obligation, found in sections 16 and 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, applies to all decisions concerning listed buildings.

*The recent Court of Appeal decision in the case of Barnwell vs East Northamptonshire DC 2014(2) made it clear that in enacting section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 (1) Parliament's intention was that **'decision makers should give "considerable importance and weight" to the desirability of preserving the setting of listed buildings' when carrying out the balancing exercise**.*

Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (" the 1990 Act ") provides:

"(1) In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses."

Section 72 of the 1990 Act provides:

"(1) In the exercise, with respect to any buildings or other land in a conservation area, of any of the provisions mentioned in sub-section (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.

(2) The provisions referred to in sub-section (1) are the planning Acts ..."

A finding of harm to the setting of a listed building is a consideration to which the decision-maker must give "considerable importance and weight" (*The Bath Society v Secretary of State for the Environment* [1991] 1 W.L.R. 1303, per Glidewell LJ at 1319; and see *East Northamptonshire District Council v Secretary of State for Communities and Local Government* [2015] 1 W.L.R. 45 , per Sullivan LJ at [22]–[23] and [29]).

The relevant policies of the National Planning Policy Framework are paragraphs 128–135, the material parts of which provide:

"128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance... 129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise...

131. In determining planning applications, local planning authorities should take account of:

"• the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; ..."

132. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. ...

133. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply: ...

134. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

135. *The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset.*"

The National Planning Policy Framework (paragraph 144) also states:

When determining planning applications, local planning authorities should:

- *give **great weight** to the benefits of the mineral extraction, including to the economy;*

Commentary

In considering the potential development of the Trigon Hill Extension site, with acknowledged impacts on a designated heritage asset, the following points have been taken into consideration.

- There is "a strong presumption against harm to designated assets" (Barnwell [2014] EWCA Civ 137; Forge Field [2014] EWHC 1895 (Admin))
- "Considerable weight" must be given to harm to designated assets, however slight, if more than de minimis (Barnwell; Forge Field; Jones [2015] EWCA Civ 1243)
- *Mordue v Secretary of State for Communities and Local Government and others* [2015] EWCA Civ 1243. Heritage assets have statutory protection, unlike other material considerations; and the NPPF has a complex template for their consideration. Both must be considered in an assessment.
- Failure to assess alternative sites on appropriate public interest criteria (Forge Field; ENV4)
- The policy presumption in favour of sustainable development does not apply to cases of harm to designated assets (Gladman [2016] EWHC 421 (Admin))
- Cumulative effects must be considered (PPG)
- All recognised harm must be included in the recommended Planning balance (Barnwell)
- Undue weight should not be given to the temporary nature of development (National Wind Power [1999] N.P.C. 128)

Development of the site would not cause substantial harm to the barrow itself, but would have an impact on its setting. Development of the site would result in temporary harm to the setting of the barrow – this would be 'less than substantial' harm, for a temporary period. This harm has been given great and considerable weight in this assessment

A range of sites nominated for allocation in the Mineral Sites Plan for sand and gravel quarries have been assessed on heritage grounds and on a range of other grounds. A number have been rejected for reasons other than heritage issues. The remaining sites have been included in the Draft Mineral Sites Plan.

The proposal is for a temporary period, after which the site will be restored and the impact on the heritage asset setting will be removed.

The Heritage Impact Assessment that would be carried out as part of any planning application would identify the setting of the heritage asset and would identify appropriate mitigation to offset the harm to the setting resulting from development of the site to a level that would allow the development to go ahead.

It is expected that the mitigation would be a combination of screening (an earth bund) and a standoff/buffer. **A series of additional development guidelines are proposed to be added to the Plan to mitigate impacts or reduce them to non-significant levels. It is also proposed to include an additional development guideline to provide details on the restoration scheme in the context of the Trigon Hill Barrow.**

If mitigation is not possible, or if the necessary standoff was such that it made the site uneconomic to develop, then the development would not go ahead.

In considering potential impacts and mitigation, it must be remembered that this is not a planning application, but a nomination for allocation of a site in the Mineral Sites Plan. The evidence required and level of assessment carried out

at this stage are considered to be proportionate and appropriate. At the planning application stage a detailed Heritage Impact Assessment on the assets and their settings will be carried out, as part of an Environmental Impact Assessment, and the appropriate mitigation identified and applied.

At the current stage, the Mineral Planning Authority is considering whether the proposed nomination can reasonably be allocated through the Mineral Sites Plan, on the understanding that appropriately detailed assessment work will be carried out at a later date, and appropriate mitigation applied.

Although inclusion in an adopted plan gives a site allocation greater weight and likelihood of development, it is **not** deemed planning permission. Any allocation in an adopted plan still needs to go through the full planning application process, including Environmental Impact Assessment, and if impacts are identified that cannot be satisfactorily mitigated, the proposal will not receive permission.

It is considered, taking into account:

- the less than substantial harm to the setting of the barrow;
- the great and considerable weight given to such harm, and the strong presumption against such harm;
- the temporary nature of the harm
- the great weight to be given to the provision of mineral
- the fact that minerals must be worked where they are found
- the fact that this is an extension site, and the processing plant and other infrastructure is already available
- the fact that the proposed development will be subject to planning application including Environmental Impact Assessment, and impacts on the setting will be assessed in detail and appropriate mitigation identified

that the public benefit to be received from this proposed development, and the nature and duration of the development causing harm, together with the scope for mitigating this harm, are such that the site should be allocated in the Mineral Sites Plan.

Cumulative Impacts

There is other mineral working in the vicinity, both existing and proposed as well as waste management. The proposed site is an extension to existing mineral working/waste disposal. As an extension site, there will be no cumulative impact but this would represent an extension of time of working.

AS12 Philliol's Farm and AS15 Tatchell's will both use the C7 and with Trigon this could lead to transport impacts, including cumulative impacts. If this situation were likely to arise, careful assessment would be needed to demonstrate that the road could carry the potential traffic loading. The site at Trigon Hill (BC04) would also have to be taken into consideration, along with any new development in and around Wareham. An additional development guideline is proposed to highlight the potential for cumulative impacts resulting from this proposal and others in the vicinity. Opportunities for minimising these impacts are required to be considered.

It should also be noted that a modification is proposed to remove one of the sites, AS12 Philliols Farm, from the Mineral Sites Plan. This will reduce the cumulative impacts of mineral working locally.

The proposal is within 5Km (by road) of a site allocated in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy CEN) for development of 200 dwellings and community facilities, off Worgret Road, Wareham. Traffic arising from the new residential development will also add to general traffic levels in / around Wareham.

Viability

As an extension to an existing operational site, viability is not considered to be an issue. The extension will use existing processing facilities, road access and serve existing markets, and therefore these do not have to be provided.

Summary.

Potential Benefits	Potential Impacts
<ul style="list-style-type: none"> • Provision of ball clay, considered a nationally important mineral. • Economic benefits of mineral production. • Restoration could include some increased and improved public access. 	<ul style="list-style-type: none"> • Site is close to European designated heathland; contains Annex 1 birds and could be designated as a Special Protection Area; there are possible impacts on national designations (SSSI nearby) and possible threats to protected species on/around the site. Further assessment, including Appropriate Assessment, will be required to better understand these impacts and to determine whether they can be satisfactorily mitigated. Development guideline are proposed to ensure that an appropriate buffer between the allocation and the European site is created and that phased working enables restoration of high quality heathland. • Ground and surface water – further assessment required to determine possible impacts of quarrying on hydrology and hydrogeology, but these expected to be capable of mitigation. • Archaeology and historic landscapes – potential impacts on both of these, further assessment required to determine likely impacts, but any impacts expected to be mitigable. Modifications are proposed for a series of development guidelines to address this issue. • Landscape capacity and visual impacts are a key issue and impacts must be assessed and appropriately mitigated. Landscape and visual assessment will be required. A modification is proposed to clarify that proposals must mitigate impacts or reduce them to non-significant levels.

Overall Recommendation:

This is a relatively small site which is primarily intended for the production of ball clay.

Assessment already carried out has flagged up biodiversity, hydrology/hydrogeology, archaeology and landscape/visual impacts as the key issues to be addressed as part of working this site. Further assessment, including Appropriate Assessment under the Habitat Regulations, is required to identify satisfactory mitigation and to identify if there are any additional impacts that will require mitigation.

Inclusion of an element of heathland in the restoration is required.

Subject to the completion of all necessary assessments and providing that any impacts are capable of satisfactory mitigation, it appears reasonable on the basis of evidence available that the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Updated Recommendation (November 2018)

A series of additional development guidelines are proposed as modifications to the Mineral Sites Plan. These modifications provide additional mitigation measures that will reduce the impacts of working and provide benefits through restoration. The site therefore remains appropriate for allocation in the Bournemouth, Dorset and Poole Mineral Sites Plan.

Updated Recommendation (February 2019)

A modification is proposed to remove this site from the Plan following grant of planning permission

Purbeck Stone : PK02 Blacklands Quarry, Acton Assessment (February 2019)

Site Name/Location: PK02 Blacklands Quarry, Acton	Nominee/Agent: National Trust Local Authority: Purbeck District Council Mineral Type: Purbeck Stone	Site Area: approximately 1.34 ha Production: approx. 2,000 tpa Reserve: approx. 52,000 tonnes
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Impact Assessment Scoring

-	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain
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Timescales for effects:

P/W: Preparation and Working

R/A: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	N/A	N/A	<ul style="list-style-type: none"> This Objective is not relevant to this site nomination 	<ul style="list-style-type: none"> N/A
2. To maintain, conserve and enhance biodiversity	0	0	European/International Designations <ul style="list-style-type: none"> No impacts expected. 	<ul style="list-style-type: none"> No action required.
	0	0	Annex 1 Bird Species <ul style="list-style-type: none"> No impacts expected. 	<ul style="list-style-type: none"> No action required.
	0	0	National Designations <ul style="list-style-type: none"> No impacts expected. 	<ul style="list-style-type: none"> No action required.
	0	0	Protected species <ul style="list-style-type: none"> Great Crested Newt is known to breed in a pond within 500m of the proposed site. However, the current land use of improved agricultural grazing land is unlikely to provide any habitat of importance to the species, and the likely effect of mineral extraction on GCN is probably insignificant. 	<ul style="list-style-type: none"> Ecological surveys required, with appropriate mitigation if required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0		
	0	0	<p>Local recognitions/designations, including ancient woodland and veteran trees</p> <ul style="list-style-type: none"> No impacts expected. 	<ul style="list-style-type: none"> No action required.
3. To maintain, conserve and enhance geodiversity.	+	0	<ul style="list-style-type: none"> The Purbeck limestone group has an important association with the geology of the Jurassic Coast World Heritage Site. Working quarries in Purbeck have been known to yield important fossils, including dinosaur footprints. They are also of ongoing interest for the study of early Cretaceous stratigraphy. These interests should be acknowledged with the assumption that geologists and the Jurassic Coast Team hosted by DCC will respond positively to any opportunities to recover fossils or record and study unusual features if they are discovered. In terms of geodiversity there is a presumption in favour of an appropriate level of quarrying activity continuing in order to sustain the ongoing interests. 	<ul style="list-style-type: none"> Note potential for quarries to yield fossils or other material of geodiversity interest. Visits or other investigation of working sites may be requested. Investigate potential and/or benefits of leaving quarried face open after restoration.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	0	0	<p>Groundwater</p> <ul style="list-style-type: none"> Site overlies Secondary aquifers. No impact on Source Protection Zones. No licenced supplies. 	<ul style="list-style-type: none"> Simple hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality. Any fuel on site should be properly stored to avoid contamination in case of spillage. Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.
	0	0	<p>Surface Water</p> <ul style="list-style-type: none"> Watercourses approximately 460m to the west of the site, but no significant water interests in the vicinity. 	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
5. To reduce flood risk and improve flood management.	0	0	Flooding/Coastal Stability <ul style="list-style-type: none"> Site is entirely in Flood Risk Zone 1, no risk of flooding. 	<ul style="list-style-type: none"> No action required.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).	?	0	Archaeology <ul style="list-style-type: none"> The discovery of Iron Age and Roman period remains at the Blacklands site to the west and north of the proposal site indicates the present site's high potential for below-ground archaeology. There is also potential for industrial archaeological evidence of early quarrying. Archaeological assessment and evaluation would be required before an informed planning decision could be made. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from 'Very Significant' to 'No Significant' impacts. 	<ul style="list-style-type: none"> Archaeological survey of the area required as part of planning application to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working – no further work required at site allocation stage.
	?	0	Historic Landscapes <ul style="list-style-type: none"> The local landscape bears the imprint of previous quarrying dating from the Roman period onwards. It could be argued that the present site would be a continuation of the process, and if the site is to be restored afterwards the impact would be limited in time anyway. Further evaluation will be required. When this has been undertaken possible impacts, if any, will be better understood. 	<ul style="list-style-type: none"> All necessary mitigation to be implemented prior to working. Adequate provision to be made for preservation, excavation or recording, as appropriate. Further consideration to be given to restoration proposals, in terms of historic landscapes.
	-	0	Historic Buildings <ul style="list-style-type: none"> This is a quarry set in a quarrying landscape and the nearest listed buildings are too far away to be affected. Potential impacts on setting of Acton Conservation Area 	<ul style="list-style-type: none"> Heritage Assessment to be carried out to identify level of impact and appropriate mitigation.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	-	0	Landscape Capacity <ul style="list-style-type: none"> Potential cumulative adverse impacts on the amenity of users of Priests Way. Restoration of adjacent quarries recommended to help avoid any cumulative landscape and visual impact. 	<ul style="list-style-type: none"> Assessment of potential visual impacts will be required at planning application stage. All appropriate mitigation to be included. Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
	0	0	Designated Landscapes <ul style="list-style-type: none"> Less significant adverse impact. 	
8. To protect and improve air quality and reduce the impacts of noise.	0	0	<ul style="list-style-type: none"> Impacts on air quality expected to be negligible. No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site. 	<ul style="list-style-type: none"> Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	-	0	<ul style="list-style-type: none"> Site is 'Good to Moderate' agricultural land. Soils will be stripped and protected during preparation and working and reused on site as part of restoration. 	<ul style="list-style-type: none"> Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.
10. To conserve and safeguard mineral resources.	++	0	<ul style="list-style-type: none"> The site would make an important contribution to the supply of Purbeck Stone for Bournemouth, Dorset and Poole and all other potential markets. 	<ul style="list-style-type: none"> No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	0	0	<ul style="list-style-type: none"> This proposal does not promote the use of alternative materials – there are no alternatives to Purbeck Stone as such. 	<ul style="list-style-type: none"> No action required.
12. To provide an adequate and affordable supply of	+	0	<ul style="list-style-type: none"> Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. 	<ul style="list-style-type: none"> Ensure principles of sustainable development are incorporated into the

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
minerals to meet society's needs.			<ul style="list-style-type: none"> Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective. 	development of this site.
13. To promote and encourage sustainable economic growth	+	0	<ul style="list-style-type: none"> This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of Purbeck Stone required for new build, repairs and maintenance, decorative and monument work and landscaping work. Both levels are expected to maintain employment, skilled and unskilled. Mineral working has the potential to negatively affect businesses in the locality, e.g. through contributing to traffic congestion, noise, visual and perception related issues. Restoration to agriculture will maintain an on-going positive benefit. Restoration to agriculture will offer some economic benefits through both the agriculture itself and the recreational attraction and use in the wider area (i.e. riding, walking). 	<ul style="list-style-type: none"> Impacts will be identified as part of any planning application and mitigation during working will be applied where necessary – e.g. further screening. No action required.
	?	+		
14. To adapt to and mitigate the impacts of climate change.	-	0	<ul style="list-style-type: none"> Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. 	<ul style="list-style-type: none"> Use energy efficient plant and machinery. Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals	-	0	<ul style="list-style-type: none"> Access proposed is onto the B3069 via the existing Acton quarry access and a short section of the C135. The access and the junctions in the immediate vicinity are suitable for the small number of proposed 	<ul style="list-style-type: none"> Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
transport on the transport network, mitigating any residual impacts.			<p>movements to this site (c. 4 trips per week). Onward movements to the strategic network would be via the B3069 to the A351, either through Kingston or Langton Matravers.</p> <ul style="list-style-type: none"> Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network. 	<p>consider vehicle routing. The TA should be scoped with the Transport Development Management Team.</p> <ul style="list-style-type: none"> Transport Assessment will identify opportunities for reducing impacts on the transport network.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	-	0	<ul style="list-style-type: none"> The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy. 	<ul style="list-style-type: none"> Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	-	0	<p>Impact on Sensitive Human Receptors</p> <ul style="list-style-type: none"> Number of residential properties within 350m and within 500m. Row of cottages just north of Priest's Way. Site is an extension of existing quarry in an area with a long history of quarrying. Impacts could be either 'Less Significant' or 'Not Significant', given the context of the site. 	<ul style="list-style-type: none"> Provision of appropriate mitigation, following assessment of likely impacts. Restoration to improve landscape of site where possible; and to seek to facilitate public access. Screening, bunding, standoffs will be used to mitigate impacts where considered necessary.
	0	0	<p>Impact on Existing Settlements</p> <ul style="list-style-type: none"> Nearest settlement is Acton, some 300m north of the proposed extension. Site extension not visible from Acton. Long history of stone quarrying in the area. Visual or noise impacts are not expected to affect these settlements, nor will there be any intensification of traffic generated by the proposed extension. However existing traffic levels generated by the current operation will continue for a longer period of time. 	<ul style="list-style-type: none"> Transport Assessment to be carried out, identifying possible impacts and opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0	Impact on Airport Safety <ul style="list-style-type: none"> Site is approximately 23 km from airport, with no wet working or restoration. No impacts expected. 	<ul style="list-style-type: none"> No action required.
18. To enable safe access to countryside and open spaces.	0	0	Impact on Recreational Land <ul style="list-style-type: none"> Site is agricultural land, with no formal/informal recreation use. There may be an opportunity to provide access following working. 	<ul style="list-style-type: none"> Assessment of impacts, with appropriate mitigation identified. Restoration to include considering how it might be possible to improve public access in the area.
	- ?	0	Impact on Public Rights of Way <ul style="list-style-type: none"> No rights of way cross the site, but Priests Way runs close to the northern boundary. Screening unlikely to be required and impacts should be minimal but further assessment required. 	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
<ul style="list-style-type: none"> Watercourses Ponds/lakes, including wet habitats Groundwater 	<ul style="list-style-type: none"> Potential for contamination of controlled waters (groundwater) through spillage or seepage of pollutants such as fuel. Contamination of water supplies or reduction in amount of water available for licenced supplies. 	<ul style="list-style-type: none"> Appropriate arrangements to be made for ensuring that runoff from the site does not enter the groundwater unless any silt or other pollutant has first been removed. Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. On-going monitoring during development and working of the site. 	<ul style="list-style-type: none"> Water Framework Assessment required. Simple hydrological risk assessment required. Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flooding Risk Commentary

Site is entirely within Flood Zone 1.

Limited risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Viability

As an extension to an existing site, the proposal is expected to be viable in development.

Heritage Impacts

The northern boundary of the site as identified is approximately 60m from the Acton Conservation Area. This proximity, and the impact the development of the site would have on the setting of these heritage assets must be carefully considered against the public and other benefits of aggregate production.

Policy/Legislative Background

The Historic England website notes:

When making a decision on all listed building consent applications or any decision on a planning application for development that affects a listed building or its setting, a local planning authority must have special regard to the

desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. Preservation in this context means not harming the interest in the building, as opposed to keeping it utterly unchanged.

This obligation, found in sections 16 and 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, applies to all decisions concerning listed buildings.

The recent Court of Appeal decision in the case of Barnwell vs East Northamptonshire DC 2014(2) made it clear that in enacting section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 (1) Parliament's intention was that 'decision makers should give "considerable importance and weight" to the desirability of preserving the setting of listed buildings' when carrying out the balancing exercise'.

Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (" the 1990 Act ") provides:

"(1) In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses."

Section 72 of the 1990 Act provides:

"(1) In the exercise, with respect to any buildings or other land in a conservation area, of any of the provisions mentioned in sub-section (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.

(2) The provisions referred to in sub-section (1) are the planning Acts ..."

A finding of harm to the setting of a listed building is a consideration to which the decision-maker must give "considerable importance and weight" (The Bath Society v Secretary of State for the Environment [1991] 1 W.L.R. 1303, per Glidewell LJ at 1319; and see East Northamptonshire District Council v Secretary of State for Communities and Local Government [2015] 1 W.L.R. 45 , per Sullivan LJ at [22]–[23] and [29]).

The relevant policies of the National Planning Policy Framework are paragraphs 128–135, the material parts of which provide:

"128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance...

129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise...

131. In determining planning applications, local planning authorities should take account of:

"• the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; ..."

132. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. ...

133. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply: ...

134. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

135. *The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset.*"

The National Planning Policy Framework (paragraph 144) also states:

When determining planning applications, local planning authorities should:

- *give great weight to the benefits of the mineral extraction, including to the economy;*

Commentary

In considering the potential development of the Blacklands Extension site, with potential impacts on a designated heritage asset, the following points have been taken into consideration.

- There is "a strong presumption against harm to designated assets" (Barnwell [2014] EWCA Civ 137; Forge Field [2014] EWHC 1895 (Admin))
- "Considerable weight" must be given to harm to designated assets, however slight, if more than de minimis (Barnwell; Forge Field; Jones [2015] EWCA Civ 1243)
- *Mordue v Secretary of State for Communities and Local Government and others* [2015] EWCA Civ 1243. Heritage assets have statutory protection, unlike other material considerations; and the NPPF has a complex template for their consideration. Both must be considered in an assessment.
- Failure to assess alternative sites on appropriate public interest criteria (Forge Field; ENV4)
- The policy presumption in favour of sustainable development does not apply to cases of harm to designated assets (Gladman [2016] EWHC 421 (Admin))
- Cumulative effects must be considered (PPG)
- All recognised harm must be included in the recommended Planning balance (Barnwell)
- Undue weight should not be given to the temporary nature of development (National Wind Power [1999] N.P.C. 128)

Development of the extension would not be expected to cause substantial harm to the Conservation Area but could have an impact on its setting. If so, this would be expected to be 'less than substantial' harm, and for a temporary period. This potential for harm has been given great and considerable weight in this assessment.

Sites nominated for allocation in the Mineral Sites Plan have been assessed on heritage and other grounds. A number have been rejected for various reasons, and the remaining sites have been included in the Draft Mineral Sites Plan.

The proposal is for a temporary period, after which the site will be restored and the impact on the heritage asset setting will be removed.

The more detailed assessment that would be carried out as part of any planning application would address heritage impacts and identify appropriate mitigation to offset any harm identified.

Mitigation could include screening (an earth bund) and/or a standoff/buffer.

If mitigation is not possible, or if the necessary standoff was such that it made the site uneconomic to develop, then the development would not go ahead.

In considering potential impacts and mitigation, it must be remembered that this is not a planning application, but a nomination for allocation of a site in the Mineral Sites Plan. The evidence required and level of assessment carried out at this stage are considered to be proportionate and appropriate.

At the current stage, the Mineral Planning Authority is considering whether the proposed nomination can reasonably be allocated through the Mineral Sites Plan, on the understanding that appropriately detailed assessment work will be carried out at a later date, and appropriate mitigation applied.

Although inclusion in an adopted plan gives a site allocation greater weight and likelihood of development, it is not deemed planning permission. Any allocation in an adopted plan still needs to go through the full planning

application process, and if impacts are identified that cannot be satisfactorily mitigated, the proposal will not receive permission.

It is considered, taking into account:

- the less than substantial harm to the setting of the heritage assets;
- the great and considerable weight given to such harm, and the strong presumption against such harm;
- the temporary nature of the harm
- the great weight to be given to the provision of mineral
- the fact that minerals must be worked where they are found
- the fact that this is an extension site, with the processing plant and other infrastructure already available
- the fact that the proposed development will be subject to planning application including Environmental Impact Assessment, and impacts on the setting will be assessed in detail and appropriate mitigation identified

that the public benefit to be received from this proposed development, and the nature and duration of the development causing harm, together with the scope for mitigating this harm, are such that the site should be allocated in the Mineral Sites Plan.

Cumulative Impacts

Site is proposed extension of existing site, in an area of both existing and proposed mineral development. It is inevitable that there will be other mineral working in the vicinity as this is the area of Dorset where the Purbeck Stone is sourced. Since the proposal comprises the extension of an existing site and will not be begun until the current site is completed, there will be no cumulative impacts from its development. However, the period of time during which the site is generating site traffic will be extended.

Site nomination comprises an extension to an existing quarry in an area where there is a high concentration and long history of mineral extraction. The cumulative effect of the number of quarries operating in this area should be taken into consideration, and as far as possible no new quarry areas should be opened unless others have been restored.

There could be cumulative visual impacts, if the new site is begun before restoration is finished on the old one. **A modification is proposed to include an additional development guideline to ensure cumulative impacts are considered and minimised.**

The proposal is within 5Km (by road) of a town (Swanage) where allocations for the development of 200 dwellings, employment and retail facilities have been made in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy SE). (Site details not yet available). Traffic arising from the new residential development will add to general traffic levels in / around Swanage and on the A351.

NB: Further work has been undertaken on cumulative impacts for all sites. This information is presented in a separate document that should be read alongside this report. There is potential for cumulative effects in relation to biodiversity; human health; air (noise); climate/GHGs; cultural heritage (historic buildings); landscape and amenity. Impacts are expected to be primarily during preparation/working, i.e. short to medium term;

There is potential for in-combination effects between receptors such as human health/amenity, landscape and cultural heritage (Listed Buildings) given the concentration of sites in this area and the Acton Conservation Area nearby. The DGs require cumulative impacts to be taken into consideration. The MPA is satisfied that identified impacts can be addressed by DGs and existing/proposed policy.

Summary

Potential Benefits	Potential Impacts
<ul style="list-style-type: none">• Provision of Purbeck Stone.• Support for the Purbeck Stone industry and employment, both locally and wherever Purbeck Stone is exported and used.• Use of the stone for heritage building works/repairs, and for new buildings.• Geodiversity benefits, through exposures created and fossils found.• Possibility of improved public access	<ul style="list-style-type: none">• Landscape capacity is one of the biggest potential impacts, especially given the proximity of the site to the Priest's Way footpath. However the proposal is an extension and the current site should be restored before moving to the extension.• There is potential impact on the setting of the Acton Heritage Area. Assessment of potential heritage impacts required, but these are expected to be capable of mitigation.• Access is not expected to be an issue. Possible impacts on footpaths to be assessed and mitigated as needed.

Overall Recommendation:

Assessment already carried out has flagged up heritage/archaeology, landscape/visual impact and access (including impacts on nearby right of way) as the key issues to be addressed as part of working this site. Further assessment will be required at planning application stage to identify satisfactory mitigation and to identify if there are any additional impacts that will require mitigation.

As the site is an extension of an existing site, it is expected that any impacts should be capable of satisfactory mitigation.

Subject to the completion of all necessary assessments and providing that any impacts are capable of satisfactory mitigation, it appears reasonable on the basis of evidence available that the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Updated Recommendation (February 2019)

A modification is proposed to reduce the site boundary as part of the site has been granted planning permission. This does not affect the conclusion.

An additional development guideline is proposed to ensure that cumulative impacts are considered and minimised. This modification should provide additional safeguards that will reduce the impacts of working. The site therefore remains appropriate for allocation in the Bournemouth Dorset and Poole Mineral Sites Plan.

Purbeck Stone : PK10 Southard Quarry, near Swanage Assessment (February 2019)

Site Name/Location: PK10 Southard Quarry, near Swanage Mineral Type: Purbeck Stone	Nominee/Agent: WJ Haysom & Son Local Authority: Purbeck District Council	Site Area: approximately 0.5 ha Production: 500 tpa Reserve: approximately 107,500 tonnes
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Impact Assessment Scoring

-	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain
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Timescales for effects:

P/W: Preparation and Working

R/A: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	N/A	N/A	<ul style="list-style-type: none"> This Objective is not relevant to this site nomination 	<ul style="list-style-type: none"> N/A
2. To maintain, conserve and enhance biodiversity	0	0	European/International Designations <ul style="list-style-type: none"> No impacts expected. 	<ul style="list-style-type: none"> No action required.
	0	0	Annex 1 Bird Species <ul style="list-style-type: none"> No impacts expected. 	<ul style="list-style-type: none"> No action required.
	0	0	National Designations <ul style="list-style-type: none"> No impacts expected. 	<ul style="list-style-type: none"> No action required.
	0	0	Protected species <ul style="list-style-type: none"> No impacts expected 	<ul style="list-style-type: none"> No action required.
	0	0	Local recognitions/designations, including ancient woodland and veteran trees <ul style="list-style-type: none"> No impacts expected 	<ul style="list-style-type: none"> No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
3. To maintain, conserve and enhance geodiversity.	+	+	<ul style="list-style-type: none"> The Purbeck limestone group has an important association with the geology of the Jurassic Coast World Heritage Site. Working quarries in Purbeck have been known to yield important fossils, including dinosaur footprints. They are also of ongoing interest for the study of early Cretaceous stratigraphy. These interests should be acknowledged with the assumption that geologists and the Jurassic Coast Team hosted by DCC will respond positively to any opportunities to recover fossils or record and study unusual features if they are discovered. In terms of geodiversity there is a presumption in favour of an appropriate level of quarrying activity continuing in order to sustain these ongoing interests. 	<ul style="list-style-type: none"> Note potential for quarries to yield fossils or other material of geodiversity interest. Visits or other investigation of working sites may be requested. Investigate potential and/or benefits of leaving quarried face open after restoration.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	0	0	<p>Groundwater</p> <ul style="list-style-type: none"> Site overlies Secondary aquifers. No impact on Source Protection Zones. No licenced supplies. 	<ul style="list-style-type: none"> Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality. Any fuel on site should be properly stored to avoid contamination in case of spillage. Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.
	0	0	<p>Surface Water</p> <ul style="list-style-type: none"> Spring within 500m of site. No impacts expected on this. 	
5. To reduce flood risk and improve flood management.	0	0	<p>Flooding/Coastal Stability</p> <ul style="list-style-type: none"> Site is entirely in Flood Risk Zone 1, no risk of flooding. 	<ul style="list-style-type: none"> No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).	?	0	<p>Archaeology</p> <ul style="list-style-type: none"> It is considered that the site has high potential for below-ground archaeology and possibly industrial archaeological evidence of early quarrying. Archaeological assessment and evaluation would be required before an informed planning decision could be made. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from 'Very Significant' to 'No Significant' impacts. 	<ul style="list-style-type: none"> Archaeological survey of the area required as part of planning application to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working – no further work required at site allocation stage. All necessary mitigation to be implemented prior to working. Adequate provision to be made for preservation, excavation or recording, as appropriate. Further consideration to be given to restoration proposals, in terms of historic landscapes.
	0	0	<p>Historic Landscapes</p> <ul style="list-style-type: none"> The local landscape bears the imprint of previous quarrying dating from the Roman period onwards. It could be argued that the present site would be a continuation of the process, and if the site is to be restored afterwards the impact would be limited in time anyway. 	
	0	0	<p>Historic Buildings</p> <ul style="list-style-type: none"> This site extends a quarry away from its nearest listed building and the site as a whole is part of a quarrying landscape. This means there is minimal impact on the historic building. No significant impacts expected 	<ul style="list-style-type: none"> No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	?	0	<p>Landscape Capacity</p> <ul style="list-style-type: none"> There may be an issue of cumulative landscape & visual impact; before this site is consented it is recommended that other quarries in the area are restored. Potential for an adverse impact on the amenity of the footpath users. Mitigation measures must limit height of stock piles. 	<ul style="list-style-type: none"> Assessment of potential visual impacts will be required at planning application stage. All appropriate mitigation to be included, including restoration of other sites in the vicinity, as appropriate. Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
	?	0	<p>Designated Landscapes</p> <ul style="list-style-type: none"> Site proposal has a Category C (Less Significant Adverse Impact) rating. 	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
8. To protect and improve air quality and reduce the impacts of noise.	0	0	<ul style="list-style-type: none"> Impacts on air quality expected to be negligible. No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site. 	<ul style="list-style-type: none"> Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	-	0	<ul style="list-style-type: none"> Soils are good to moderate in quality. Any soil removed will be protected during working and either re-used on site or taken elsewhere to be used. Further assessment may be required to determine soil quality. 	<ul style="list-style-type: none"> Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.
10. To conserve and safeguard mineral resources.	+	0	<ul style="list-style-type: none"> The site would make an important contribution to the supply of Purbeck Stone for Bournemouth, Dorset and Poole and all other potential markets. 	<ul style="list-style-type: none"> No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	0	0	<ul style="list-style-type: none"> This proposal does not promote the use of alternative materials – no alternatives to Purbeck Stone.. 	<ul style="list-style-type: none"> No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	<ul style="list-style-type: none"> Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective. 	<ul style="list-style-type: none"> Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	<ul style="list-style-type: none"> This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of Purbeck Stone required for new build, repairs and maintenance, decorative and monument work and landscaping work. Both 	<ul style="list-style-type: none"> Impacts to be identified and mitigation during working will be applied where necessary – e.g. holding back quarry

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<p>levels are expected to maintain employment, skilled and unskilled.</p> <ul style="list-style-type: none"> Mineral working has the potential to negatively affect businesses in the locality, e.g. through contributing to traffic congestion, noise, visual and perception related issues. Restoration to agriculture will offer some further economic benefits through both the agriculture itself and the recreational attraction and use in the wider area (i.e. riding, walking). 	<p>traffic during peak travel times, further screening..</p>
14. To adapt to and mitigate the impacts of climate change.	-	0	<ul style="list-style-type: none"> Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. 	<ul style="list-style-type: none"> Use energy efficient plant and machinery. Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	-	0	<ul style="list-style-type: none"> Access proposed is via an existing permitted route through the edge of Swanage to the A351. While the roads used are residential and not ideal for quarry related traffic there is little alternative for this and other local small scale extraction. The level of trips to and from this site by HGVs is likely to be low and sporadic, being linked to specific extraction campaigns and market demand. The stipulated assessment criteria mean that this site has been given a 'Significant Adverse Impact' rating as the site necessarily means that HGVs will pass through relatively narrow roads within the existing settlement. However, extraction at this site has been operational for some time and there is no indication that there will be any significant increase in extraction. Provided that HGV traffic continues to use agreed routes through the residential area to the north there is little adverse 	<ul style="list-style-type: none"> Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team and is intended to identify opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			<p>impact and the site could be considered to have a 'Less Significant Adverse Impact' rating.</p> <ul style="list-style-type: none"> • Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network. 	
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	-	0	<ul style="list-style-type: none"> • The proposed site can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy. 	<ul style="list-style-type: none"> • Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	?	0	<p>Impact on Sensitive Human Receptors</p> <ul style="list-style-type: none"> • No properties within 250m, closest property is approximately 290m, other properties within 500m and on to Swanage. • Site likely to be screened from closest properties, more distant views into site. Site screening may be required. 	<ul style="list-style-type: none"> • Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to facilitate public access. • Screening, bunding, standoffs will be used to mitigate impacts where considered necessary.
	-	0	<p>Impact on Existing Settlements</p> <ul style="list-style-type: none"> • Closest settlement is Swanage, to the north and north-east, at around 480-500m distant at the closest. • Visually, site is likely to be screened from closest properties. Possibility of more distant views into site and site screening may be required. Context of the site is area of mineral working and waste management. • Traffic/transport impacts are covered under Objective 15 above. 	<ul style="list-style-type: none"> • Transport Assessment to be carried out, identifying possible impacts and opportunities for reducing impacts on the transport network. • Visual impact assessment will also be required, as referred to above.
	0	0	<p>Impact on Airport Safety</p> <ul style="list-style-type: none"> • Site is approximately 22 km from airport, with no wet working or restoration. • No impacts expected. 	<ul style="list-style-type: none"> • No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
18. To enable safe access to countryside and open spaces.	0	+ ?	Impact on Recreational Land <ul style="list-style-type: none"> Site is agricultural land, with no formal/informal recreation use. 	<ul style="list-style-type: none"> Assessment of impacts, with appropriate mitigation identified. Restoration to include considering opportunities to improve public access in the area.
	0	0	Impact on Public Rights of Way <ul style="list-style-type: none"> No rights of way cross the site or run adjacent to its boundary. 	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
<ul style="list-style-type: none"> Watercourses Ponds/lakes, including wet habitats Groundwater 	<ul style="list-style-type: none"> Potential for contamination of controlled waters (groundwater) through spillage or seepage of pollutants such as fuel. Contamination of water supplies or reduction in amount of water available for licenced supplies. 	<ul style="list-style-type: none"> Appropriate arrangements to be made for ensuring that runoff from the site does not enter the groundwater unless any silt or other pollutant has first been removed. Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. On-going monitoring during development and working of the site. 	<ul style="list-style-type: none"> Full hydrogeological risk assessment will be required as part of a planning application. Flood Risk Assessment Water Framework Assessment Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is entirely within Flood Zone 1.

Limited risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Cumulative Impacts

Site is an extension to an existing quarry in an area where there is a high concentration and long history of mineral extraction. As an extension, it is not expected that there will be any cumulative impacts for traffic.

In terms of other impacts – further assessment may be necessary, along with other works such as restoration of other quarries in the vicinity and minimising the height of stockpiles. There may be an issue of cumulative landscape & visual impact; before this site is consented it is recommended that other quarries in the area are restored.

The proposal is within 5Km (by road) of a town (Swanage) where allocations for the development of 200 dwellings, employment and retail facilities have been made in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy SE). (Site details not yet available). Traffic arising from the new residential development will add to general traffic levels in / around Swanage and on the A351.

NB: Further work has been undertaken on cumulative impacts for all sites. This information is presented in a separate document that should be read alongside this report. There is potential for cumulative effects in relation to biodiversity; human health; air (noise); climate/GHGs; landscape and amenity. Possible in-combination effects with landscape and amenity. Impacts are expected to be primarily during preparation/working, i.e. short to medium term;

The DGs require cumulative impacts to be taken into consideration. The MPA is satisfied that identified impacts can be addressed by DGs and existing/proposed policy.

Viability

As an extension to an existing operational site, viability is not considered to be an issue. The extension is expected to use existing processing facilities, road access and serve existing markets, and therefore these do not have to be provided.

Summary.

Potential Benefits	Potential Impacts
<ul style="list-style-type: none"> • Provision of Purbeck Stone. • Support for the Purbeck Stone industry and employment, both locally and wherever Purbeck Stone is exported and used, with associated economic benefits. • Use of the stone for heritage building works/repairs, and for new buildings. • Geodiversity benefits, through exposures created and fossils found. • Possibility of improved public access 	<ul style="list-style-type: none"> • Transport impacts to be considered through detailed Transport Assessment at planning permission stage. No intensification of development is expected. • Potential landscape/visual impacts, including cumulative impacts. Further assessment will be required to assess whether the local landscape can accommodate the development and to identify and implement appropriate mitigation. • Further assessment is required to determine whether there will be any archaeology or other heritage impacts, but these are expected to be capable of mitigation.

Overall Recommendation:

Assessment already carried out has flagged up archaeology, landscape/visual impact and access as the key issues to be addressed as part of working this site. Further assessment will be required at planning application stage to identify satisfactory mitigation and to identify if there are any additional impacts that will require mitigation.

As the site is an extension of an existing site, it is expected that any impacts should be capable of satisfactory mitigation.

Subject to the completion of all necessary assessments and providing that any impacts are capable of satisfactory mitigation, it appears reasonable on the basis of evidence available that the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Updated Recommendation (February 2019)

No significant modifications are proposed, the site remains appropriate for allocation in the Bournemouth, Dorset and Poole Mineral Sites Plan.