

Oxfordshire Minerals and Waste Plan Minerals and Waste Core Strategy

Background Paper revised April 2012

Development of Minerals Planning Strategy

Note: This background paper was largely prepared prior to publication of the government's National Planning Policy Framework on 27 March 2012 and it has not been updated to reflect this new national policy document.

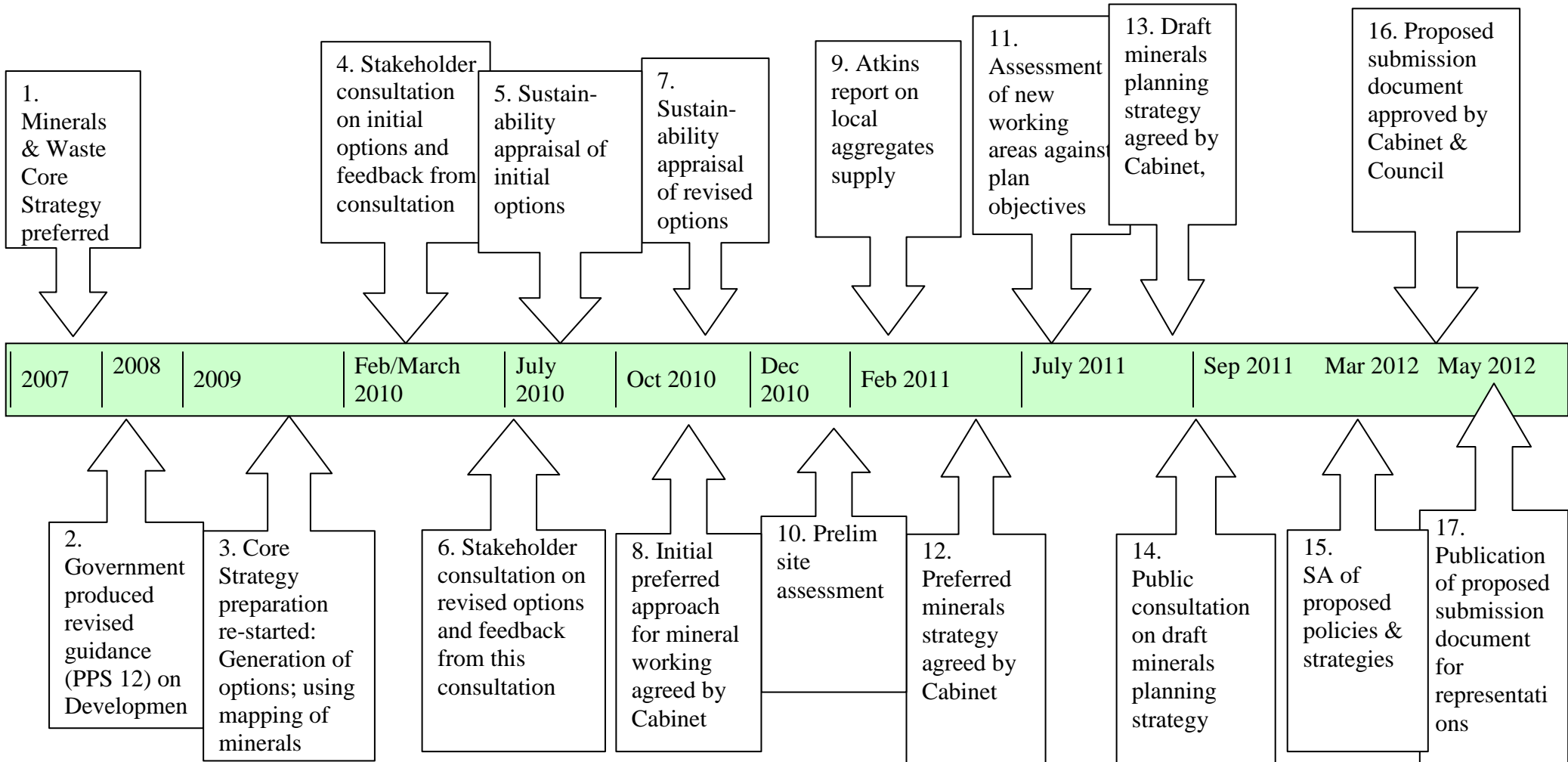
1. Introduction

- 1.1 The County Council has developed a minerals planning strategy as part of the Minerals and Waste Core Strategy, which proposes broad locations for mineral extraction in Oxfordshire over the period to 2030. It comprises three separate strategies; for sharp sand and gravel, soft sand and crushed rock. This paper describes the process of developing, consulting on and revising the strategy options, to reach the Council's proposed strategy.

2. Stages of preparation:

- 2.1 The timeline below shows the stages of preparation of the minerals strategy. The stage numbers in this document correspond to the numbered stages on the timeline. The options have been generated and revised by County Council officers, but County Councillors on the County Council's Minerals and Waste Plan Working Group have considered the emerging strategy at each significant stage of the process and provided feedback to officers. In particular, the Working Group considered the strategy options that were the subject of stakeholder consultation, the draft preferred strategy for consultation and the strategy proposed to be included in the proposed submission document. A summary of the meetings and outcomes of the Minerals and Waste Plan Working Group is at Appendix 1.

Minerals Planning Strategy – preparation timeline



3. Stage 1: Preferred options consultation, February 2007

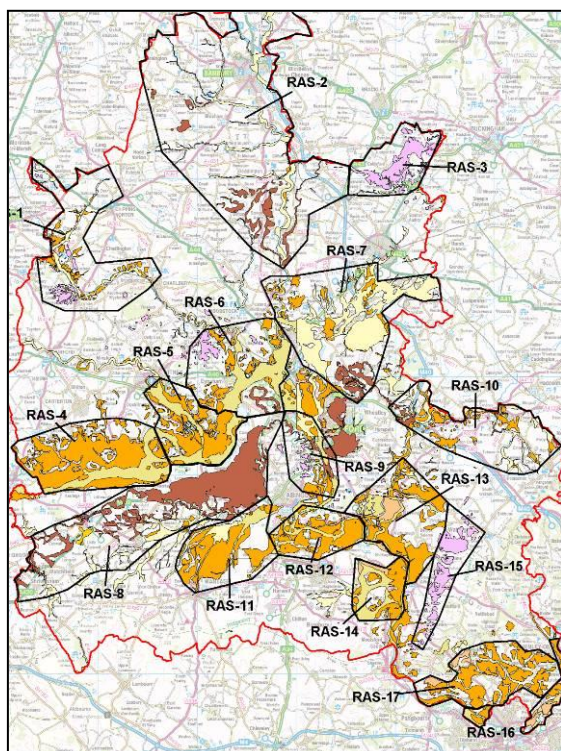
- 3.1 In 2007, the Council published a draft Preferred Options Core Strategy consultation document which set out preferred minerals and waste strategy options. A summary report of responses to that consultation document is on the Council's website. A summary analysis of responses on the minerals preferred options is at Appendix 2. Respondents to this consultation noted the cumulative impact of previous sand and gravel working in the Evenlode and Windrush valleys and the importance of preparing strategic restoration plans before further working in these areas takes place. Comments also identified that the strategy should seek to minimise distance that minerals are transported and the importance of making use of existing infrastructure.
- 3.2 The Government Office for the South East advised that the preferred options did not give sufficient spatial direction as to where minerals and waste developments will take place and consequently that the Core Strategy was at risk of being found unsound. Further work needed to be done on the options, and the responses that were made to the 2007 consultation also needed to be taken into account.

4. Stage 2: Publication of revised national planning policy, June 2008

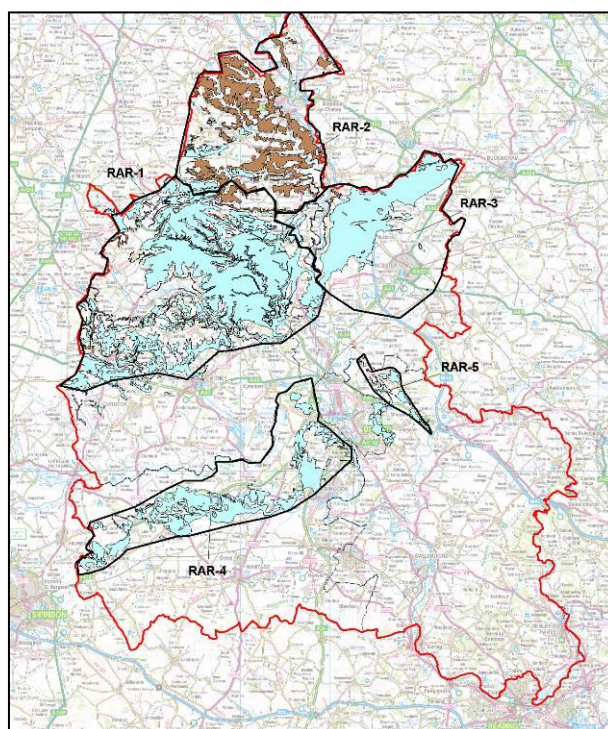
- 4.1 In June 2008, the Government issued a revised Planning Policy Statement 12: Local Spatial Planning (PPS 12) which provided guidance on the preparation of Local Development Frameworks.

5. Stage 3: Initial generation of options, 2009

- 5.1 In 2009, the Council resumed the process of developing options for the minerals strategy. British Geological Survey (BGS) maps of the sand and gravel and ironstone and limestone resources were used to identify seventeen potential areas of sand and gravel, two potential areas of soft sand and five potential areas of crushed rock. The maps below show the areas of sand and gravel and crushed rock identified. Two of the five areas in the initial option for crushed rock extraction were discounted and seven of the sand and gravel areas were discounted due to the thin and intermittent nature of the resources present in them.



Sand and gravel



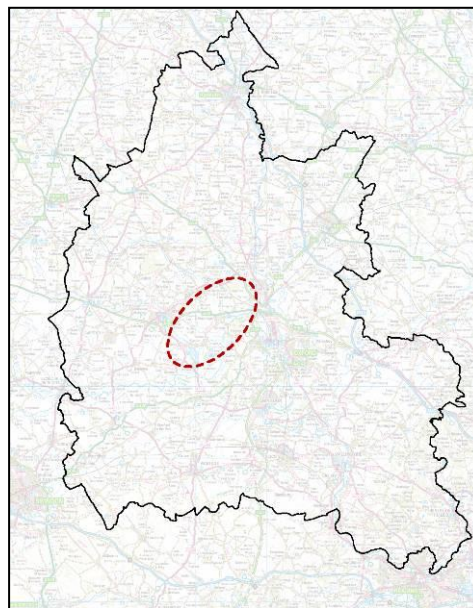
Crushed rock

6. Stage 4: Stakeholder consultation on options, February/March 2010

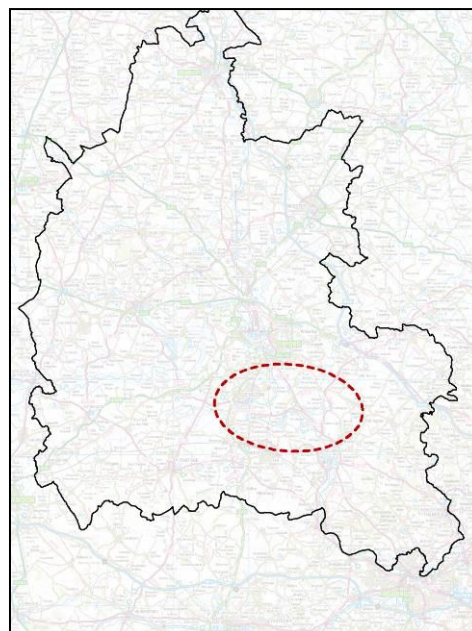
- 6.1 An initial set of options for sand and gravel, soft sand and crushed rock, as set out below, were generated for consultation.
- 6.2 A series of facilitated workshops was held for a range of stakeholders, to discuss the initial set of strategy options and to seek the stakeholders' feedback. Stakeholders included county councillors, district councillors and planning officers, parish representatives, environmental groups and mineral operators.
- 6.3 The format of each workshop was the same; officers gave a presentation which explained the process of generating the options and then described the options for sand and gravel, soft sand and crushed rock. Stakeholders were then invited to comment on the advantages and disadvantages of each of the proposed options and their feedback was recorded by the facilitators and used to compile a report which was published on the Council's website.
- 6.4 Statutory consultees (the Environment Agency, Natural England and English Heritage) were also asked to provide feedback on these options.

Sand and gravel options

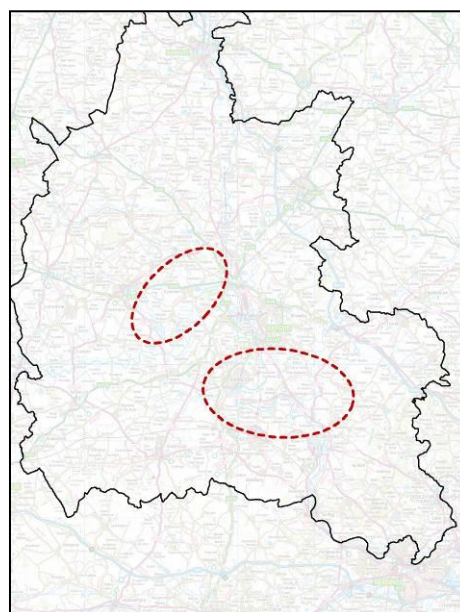
Option 1 sought to concentrate extraction of sand and gravel in areas in central Oxfordshire. Option 1a proposed to concentrate development northwest/west of Oxford in the Lower Windrush Valley, Stanton Harcourt, and the Eynsham/Cassington/Yarnton areas.



Option 1b proposed to concentrate development southeast of Oxford in the Radley, Sutton Courtenay and Warborough/Shillingford/Benson areas.

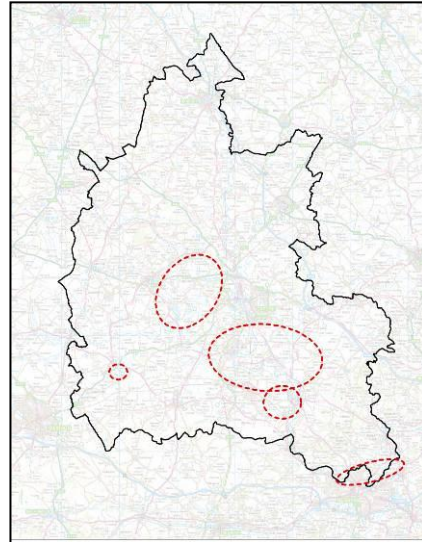


Option 1c sought to share the concentration of development between the areas north west of Oxford and south east of Oxford.



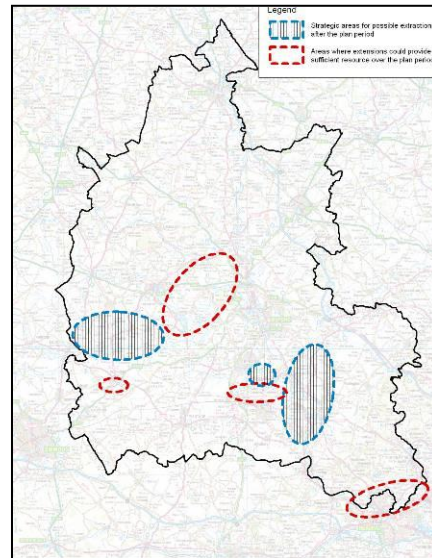
Option 2

This option sought to disperse mineral extraction as widely as possible to minimise the impact of mineral working on any one area and to reduce the impact of working in existing areas; whilst locating working close to areas of demand. It took into account the planned housing development at Oxford, Bicester, Didcot, and Wantage and Grove, and economic development in centres of employment such as Harwell, Culham and Milton Park. The strategy also took account of the significant role that the Caversham area plays in supplying aggregates to the Reading area.



Option 3

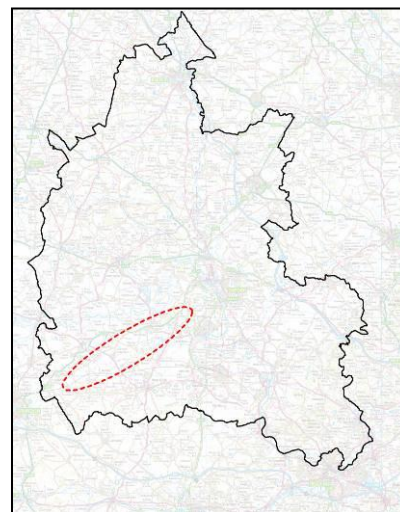
This option sought to meet the requirement for sand and gravel over the period of the Minerals Waste Core Strategy but also planned for the longer term by promoting one of several new strategic resource area options, including Clanfield, Warborough/Benson/Shillingford and Clifton Hampden. Before 2026, sand and gravel requirements would be met from extensions to existing workings, then a new area would be identified to start work after this time.



and

Soft sand option

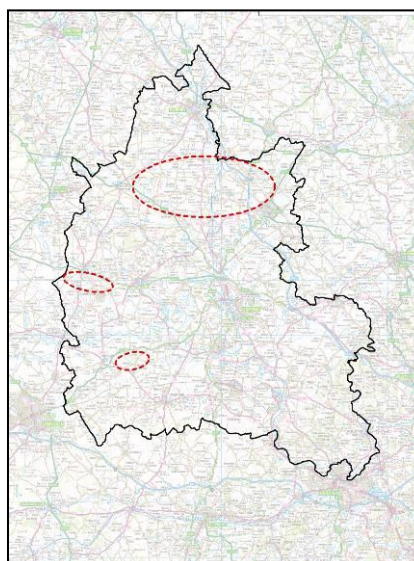
The soft sand area in the south west of the county contains the majority of the soft sand resource in the county. Operators have highlighted the difference between two distinct areas of sand within the soft sand resource. The resource around Tubney produces a higher quality product for the construction industry. It is suitable for use in the production of asphalt, dry screen and ready mix mortars. The sand which extends west from Kingston Bagpuize to Faringdon/Shillingford has a higher silt content is more appropriate for general building sand



and use.

Crushed rock option

The crushed rock strategy option sought to disperse working between three areas of limestone at Faringdon, south of Burford and in north of the county.



the

- 6.5 The following points were raised in response to the initial options:
- The options were not thought to be sufficiently distinct. Some included the same areas as other options; this was particularly the case for the sand and gravel phased option (option 3).
 - The areas covered by some options were thought to be too extensive and included areas which are unlikely to be economically workable or which are constrained by national designations.
 - Stakeholders and statutory consultees expressed concerns over the implications of the sand and gravel concentration strategy, particularly over potential transport impacts, impacts on local communities and environment, and local acceptability.
 - The potential for minerals extraction to create habitats which contribute towards Biodiversity Action Plans targets.
- 6.6 The options were assessed against the plan objectives. The assessment framework is at Appendix 3. The assessment highlighted that:
- Option 1a does not meet the objective to reduce vulnerability to climate change by reducing likely flooding.
 - Option 1b is unlikely to enable Oxfordshire to meet the locally determined requirements for supply of sand and gravel over the plan period.
 - Option 1c partly or wholly meets the relevant plan objectives.
 - Option 2 dispersal should be based on the whole area of mineral resource not just linked to markets; data on the location of markets is not evidence based; this option does not therefore meet objective iii: 'a clear and deliverable strategy...which is based on existing and planned infrastructure provision'.
 - Option 3 does not meet objective 6, which is to minimise distance minerals need to be transported; and it includes areas vulnerable to flooding, and so does not meet objective 5 on climate change.
 - The soft sand option partly or wholly meets all the relevant objectives.
 - The crushed rock option partly or wholly meets all the relevant objectives.

- 6.7 The key changes to the options that were made were:
- The extent of the areas identified was reduced through a further assessment of the realistically workable geological resource, using data from the BGS geological mapping of sand and gravel and Mineral Assessment Reports.
 - The phased approach for sand and gravel was changed to address the need for mineral working only during the plan period; and to focus more on moving to new areas of working than on continuation of working in existing areas (albeit this would still be likely to be needed in the short term).
 - Possible new areas of working were not included in the same option as concentration on existing working areas, to provide greater distinction between options.
 - The dispersed working approach for sand and gravel was related to the whole mineral resource and not to the location of demand.
 - The option areas were redrawn to exclude national environmental designations such as Areas of Outstanding Natural Beauty.

7. Stage 5: Sustainability Appraisal of initial options, May 2010

- 7.1 Consultants carried out a sustainability appraisal of the initial draft strategy options, to inform the revision of the options. The appraisal highlighted that concentrating all working in one area could lead to unacceptable impacts on local communities, on the potential for flooding in local areas and on congestion on the transport network. This led to the identification of several areas for proposed working in the revised options, rather than just one area.

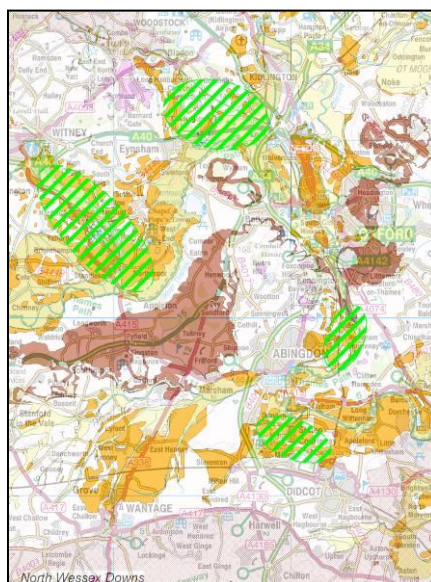
8. Stage 6: Stakeholder consultation on revised options, July 2010

- 8.1 A revised set of options was drawn up, as set out below, and further workshops were held for stakeholders in the same format as previously, to present and seek feedback on the revised options. Again, the workshops were facilitated and a report from the workshops was prepared and published on the Council's website.

Revised Sand and Gravel Strategy Options

Option 1: Concentration on Existing Working Areas

This option sought to concentrate sand and gravel working in areas where working is currently taking place or has taken place recently. This option refined the previous option 1c and included areas both to the west north west and south / south east of Oxford, around existing or recent sand and gravel working areas; new areas of working were



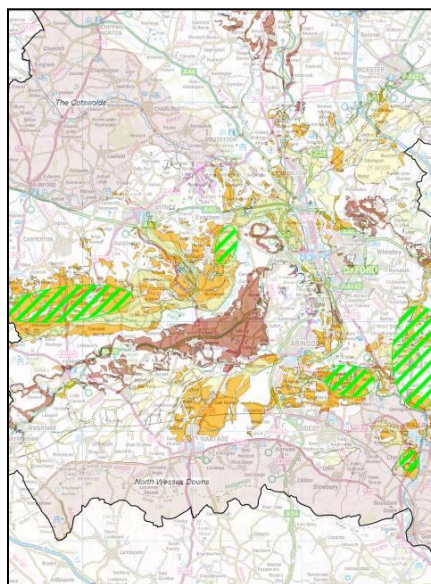
identified separately in option 2. The areas included in this option were:

- Lower Windrush Valley;
- Eynsham/Cassington/Yarnton;
- Radley;
- Sutton Courtenay.

Option 2: Concentration on New Working Areas

In response to the concern about cumulative impact of mineral working on some areas, this option identified new areas where working would be concentrated, to replace existing areas of working. In the short term, while the new areas are planned, some extensions to existing sites might be needed to maintain supply. The areas included in this option were:

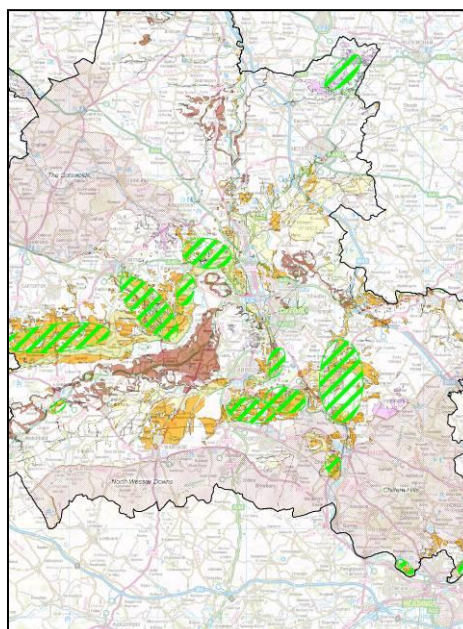
- Clanfield/Bampton;
- Warborough/Shillingford/Benson;
- Cholsey;
- Sutton/Stanton Harcourt;
- Culham/Clifton Hampden/Wittenham.



Option 3: Dispersed Working

The initial draft dispersal option sought to disperse working related to markets, to reduce mineral miles. This option was amended to provide for working to take place within any of the areas of potential sand and gravel resource, so that it represented a truly dispersed option. The areas included in this option were:

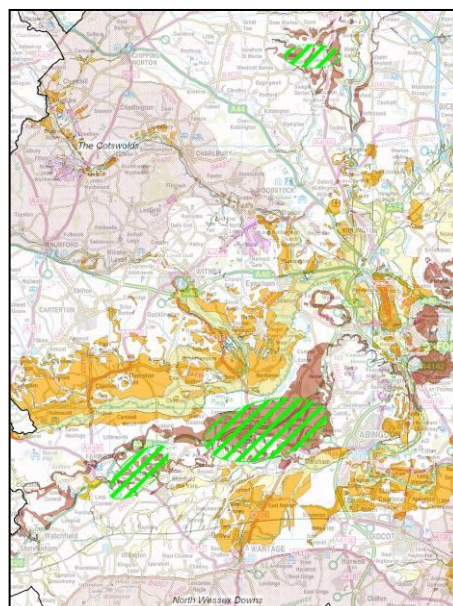
- Finmere;
- Clanfield/Bampton;
- Lower Windrush Valley;
- Eynsham/Cassington/Yarnton;
- Faringdon;
- Radley;
- Sutton Courtenay;
- Warborough/Shillingford/Benson;
- Cholsey;
- Caversham;
- Clifton Hampden/Wittenham;
- Sutton/Stanton Harcourt.



Soft Sand Strategy Option

The soft sand strategy option was modified to include an area of soft sand resource at Duns Tew in the north of the county, in response to feedback from the first consultation. The extensive area of soft sand resource in the south west of the county was reduced to two smaller areas located close to the A420. These areas would allow the current pattern of extraction of two different quality sands to be continued. The areas included in this option are:

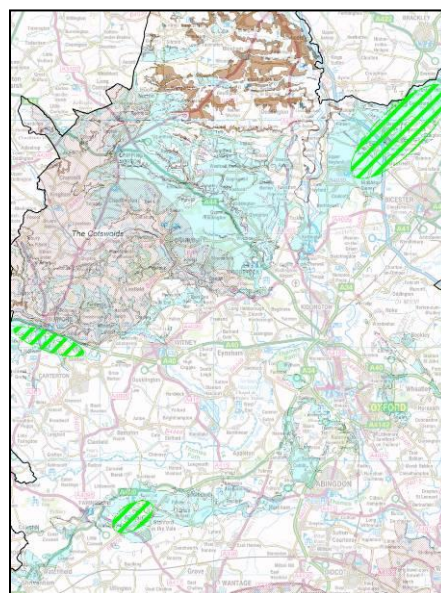
- East / South East of Faringdon;
- Tubney/Marcham/Hinton Waldrist;
- Duns Tew.



Crushed Rock Strategy Option

This option comprised three areas based around existing limestone working areas. The size of the area identified in the north of the county between Bicester and Chipping Norton was reduced to an area of search east of the River Cherwell, where the existing quarry at Ardley indicated that there are likely to be potentially workable deposits of limestone. The areas included in this option were:

- South of Burford;
- East of River Cherwell, North of Bicester;
- East / South East of Faringdon (soft sand area).



8.2 The options were assessed against the plan objectives. The assessment framework is at Appendix 3. The assessment highlighted that:

- Sand and gravel option 1 wholly or partly met all the relevant plan objectives.
- Sand and gravel option 2 wholly or partly met all the relevant plan objectives with the exception of objective 6, which is to minimise distances aggregates would have to travel by road; more than one of the areas identified would result in increased distances for aggregates to be moved to markets, so this objective would not be met.
- Sand and gravel option 3 only wholly meets one objective, to enable Oxfordshire to meet the need for aggregates over the plan period; the other relevant objectives are all only partly met because there is considerable uncertainty over the location of where working would be located, the impacts on the environment and the associated distances minerals would need to travel to markets.

- The soft sand strategy, based on existing working areas, wholly or partly meets all the relevant plan objectives.
- The crushed rock strategy, based on existing working areas, wholly or partly meets all the relevant plan objectives.

- 8.3 The following key points were raised in response to the revised options:
- a) Concentration on existing areas would take advantage of existing resources and infrastructure but would have a cumulative impact on communities, highways and the local environment.
 - b) Developing new areas could lead to increased distances for minerals to travel to markets, the need for new roads, alter the landscape in previously unaffected areas of the county but it would bring relief to communities in existing working areas.
 - c) The dispersal option was generally unpopular; it was thought likely to cause disruption in many areas, having no advantages of scale and to be potentially uneconomic.
 - d) Option 1 was most favoured, option 3 was least favoured.

9. Stage 7: Sustainability appraisal of the revised options, September 2010

- 9.1 The findings of the sustainability appraisal of the revised options noted the economic advantages of making efficient use of existing plant, infrastructure and labour force, although it noted the potential for cumulative negative effects on local communities. The preferred option therefore seeks to make best use of existing areas of working, but not to increase the rate of working in these areas, and to identify a new area to provide sand and gravel when existing reserves are exhausted.

10. Stage 8: Initial preferred approach for mineral working agreed by Cabinet, October 2010

- 10.1 Taking into account the output from the two rounds of stakeholder consultation on options, a technical assessment of the options, the sustainability appraisal and consideration by the Minerals and Waste Plan Working Group in September 2010, an initial preferred strategy approach for mineral working in the short to medium term was drawn up. This was reported to the Cabinet on 19 October 2010.
- 10.2 The Cabinet agreed the preferred approach for mineral working in the short to medium term as:
- sand and gravel – concentration of working in existing areas of working, at Lower Windrush Valley, Eynsham / Cassington / Yarnton, Radley, Sutton Courtenay and Caversham, subject to the ability of these areas to provide for the medium to longer term being re-assessed when the requirement for sand and gravel supply has been established and consideration being given to new areas of working if the re-assessment indicates this is necessary;
 - soft sand – working in three existing areas: south east of Faringdon; Tubney / Marcham / Hinton Waldrist; and Duns Tew;

- crushed rock – working in three existing areas: north of Bicester to the east of the River Cherwell; south of the A40 near Burford; and south east of Faringdon.

11. Stage 9: Atkins' study of local aggregates supply, January 2011

- 11.1 In light of the Coalition Government's localism agenda and intention to abolish regional spatial strategies, the County Council commissioned consultants, Atkins to establish alternative, robust, locally-derived figures for aggregates supply requirements for Oxfordshire. In particular, regard was had to guidance issued by the Department for Communities and Local Government on 6 July 2010 that planning authorities can set their own minerals supply requirement figures if they have 'new or different information and a robust evidence base'.
- 11.2 The consultants' report, January 2011 suggested a range of figures for sand and gravel provision based on four different methodologies. This was reported to the Minerals and Waste Plan Working Group in January 2011 and to the Cabinet on 16 February 2011. Based on this work, the Cabinet agreed a figure of 1.26 mtpa as a basis for the Council's preferred sand and gravel strategy and a figure of 0.63 mtpa as a basis for the Council's preferred crushed rock strategy, for consultation (to form part of the Minerals and Waste Core Strategy).

12. Stage 10: Preliminary site assessment, January 2011

- 12.1 A preliminary assessment of sites that had been nominated by mineral operators and landowners was undertaken by the Council in January 2011 to check that there would be sufficient sites within the option areas that could potentially deliver the required amounts of aggregates over the plan period. Each of the site nominations was assessed against the following planning criteria:
- The estimated mineral resources in the site.
 - Whether the site is in or directly adjacent to an Area of Outstanding Natural beauty.
 - Whether the site is in or directly adjacent to a site designated of international or national nature conservation importance (Special Area of Conservation, Site of Special Scientific Interest or National Nature Reserve).
 - A recommendation from the County Archaeology Officer on whether the site should be precluded on the grounds of archaeological assets.
 - The agricultural land classification of the site.
 - The proportion of the site in flood zone 3b, the functional flood plain.
 - Distance from the site to the lorry route network suitable for HGVs.
- 12.2 A separate paper explains how this preliminary assessment of nominated sites was undertaken and summarises the results of it. Separate spreadsheets for sand and gravel site nominations and for soft sand and crushed rock site nominations set out the results of the assessment.

12.3 The preliminary site assessment found that sites in the Radley and Clanfield/Bampton areas were unlikely to be deliverable during the plan period and that these areas would therefore be unlikely to make a strategic contribution to sand and gravel supply during the plan period.

12.4 The results of the preliminary site assessment were reported to the Minerals and Waste Plan Working Group in January 2011 and to the Cabinet on 16 February 2011.

13. Stage 11: Assessment of new working areas against the plan objectives

13.1 The options for a new area of working in the south of the county were assessed individually against the plan objectives. Existing working areas had already been subject to assessment against the plan objectives. The assessment framework is at Appendix 3. The assessment highlighted that:

- Proposed sand and gravel working in the Cholsey area wholly or partly met all the relevant plan objectives; the area partly met two objectives because of the area's vulnerability to flooding, and because of its proximity to the North Wessex Downs and Chilterns AONBs.
- Proposed sand and gravel working in the Clifton Hampden area only partly met most of the objectives due to constraints over access to the site, distance from markets, proximity to the River Thames and the presence of some archaeological assets.
- Proposed working in the Warborough/Benson/Shillingford area wholly met some objectives but only partly met others because of the distance of the area from planned development, the presence of archaeological assets and the limited ability of the area to contribute to Conservation Target Area restoration.

14. Stage 12: Preferred minerals strategy agreed by Cabinet, February 2011

14.1 Based on the initial strategy approach agreed in October 2010, and taking into account the report by Atkins on aggregates supply requirements and the preliminary site assessment, a revised preferred spatial strategy approach for mineral working was drawn up. Following consideration by the Minerals and Waste Plan Working Group in January 2011, this was reported to the Cabinet on 16 February 2011.

14.2 The Cabinet agreed a preferred strategy for mineral working, based on the figures agreed from the Atkins' report. The agreed strategy comprised:

- Sand and gravel – continuation of working in existing areas of working, at Lower Windrush Valley, Eynsham / Cassington / Yarnton, Sutton Courtenay and Caversham and a new area at Cholsey.
- Soft sand – working in three existing areas; south east of Faringdon; Tubney / Marcham / Hinton Waldrist; and Duns Tew.
- Crushed rock – working in three existing areas; north of Bicester to the east of the River Cherwell; south of the A40 near Burford; and south east of Faringdon.

15. Stage 13: Draft minerals planning strategy agreed by Cabinet, July 2011

15.1 On 19 July 2011, the County Council's Cabinet confirmed the strategy for mineral working agreed in February, as part of the draft minerals planning strategy, for consultation. This included the Council's proposed strategy for mineral working and policies for minerals development, and a key diagram to illustrate the preferred strategy.

16. Stage 14: Public consultation on draft minerals planning strategy

16.1 The draft minerals planning strategy was the subject of public consultation from 5 September to 31 October 2011. Responses were received from 779 individuals and organisations. Most of these were on minerals, including 548 objections to a proposed new mineral working area at Cholsey. The responses were published in full on the Council's website.

16.2 Overall the consultation did not result in any substantive issues being put forward that called into question the principles on which the draft minerals strategy was prepared or that justified fundamental change to the strategy. A number of more detailed issues were raised, in response to which some minor changes to the strategy policies were proposed. The Habitats' Regulations Assessment recommended that a finding of no likely significant effect on Oxford Meadows Special Area of Conservation (SAC) could not be reached in respect of land to the east and north east of the River Evenlode within the Eynsham / Cassington / Yarnton sharp sand and gravel area and therefore sites should not be identified for mineral working within that part of this area. The strategy should also be amended to exclude aggregate working in AONBs.

17. Stage 15: SA of proposed policies and strategy

17.1 The appraisal of the strategic minerals policies found that overall the policies supported the majority of the SA objectives. All of the common core policies were also found to be broadly in line with the SA objectives and likely to have significant positive effects upon the objectives most relevant to the policy.

18. Stage 16: Proposed submission document approved by Cabinet and Council

18.1 Minor amendments to the strategy were made in the proposed submission document to incorporate the recommendations of the Habitats Regulations Assessment report and to exclude aggregate working within AONBs. Following consideration by the Minerals and Waste Plan Working Group and the Council's Growth and Infrastructure Scrutiny Committee in February 2012, the recommended Minerals & Waste Core Strategy proposed submission document was agreed by Cabinet on 13 March 2012 and approved by the full County Council on 3 April 2012 for publication and submission.

19. Stage 17: Publication of the proposed submission document

- 19.1 The Minerals and Waste Core Strategy – proposed submission document will be published in May 2012, to enable representations to be made on the soundness of the plan and on its legal compliance.

Appendix 1: Summary and outcomes of meetings of the County Council's Minerals and Waste Plan Working Group

The Minerals and Waste Plan Working Group met at intervals throughout the process of generating and revising the minerals strategy options and establishing the Council's proposed strategy for inclusion in the Minerals and Waste Core Strategy, as summarised below:

- 1) 29 September 2009: agreed strategy options for sand and gravel as basis for informal consultation with key stakeholders.
- 2) 18 January 2010: noted update on consultation arrangements on minerals spatial strategy options.
- 3) 29 March 2010: considered output from consultations and possible revision of strategy options for further informal consultation.
- 4) 26 May 2010: further considered issues raised in output from consultations and further work and information required on strategy options.
- 5) 28 June 2010: agreed revised strategy options for further informal consultation with key stakeholders.
- 6) 27 September 2010: considered an assessment of minerals strategy options and agreed for recommendation to Cabinet (19 October 2010) an interim minerals strategy and that public consultation be carried out on a preferred minerals strategy and need for aggregates supply.
- 7) 24 January 2011: agreed for recommendation to Cabinet (16 February 2011) the use of provision figures derived from the consultants' (Atkins) report on aggregates supply requirement, as a basis for the minerals strategy and for testing through consultation, and a revised preferred strategy for sharp sand and gravel for public consultation.
- 8) 9 May 2011: noted the responses received to consultation on the Atkins report and agreed for recommendation to Cabinet (19 July 2011) a preferred minerals planning strategy for consultation.
- 9) 21 December 2011: considered the responses to consultation on the draft minerals planning strategy and the main issues raised and noted further technical work required.
- 10) 24 February 2012: considered key issues from consultation on the draft minerals planning strategy and how these had been addressed and agreed for recommendation to Cabinet (13 March 2012) draft proposed changes to policies as a basis for a Minerals and Waste Core Strategy proposed submission document.

Appendix 2: Minerals and Waste Core Strategy, Preferred Options Consultation, February 2007

Analysis of summary of responses on minerals preferred options

Summary of Responses	Action to be taken
Comments on matters raised in the section on Background and Context	
In the Sustainability Appraisal, assessment of traffic and transport impacts should be undertaken earlier in the process.	As well as the sustainability appraisal of the draft minerals spatial strategy options, OCC transport planners are providing an assessment of the draft options and of the nominated sites. The results of this will inform the selection of a preferred option.
More regard should be had to other plans and policies such as County Council policies on transport.	A review of relevant plans and policies has been undertaken as part of the updating of the Sustainability Appraisal Scoping report in April 2009
Some respondents challenged the assertion that post-mineral restoration could increase bio-diversity, suggesting instead that new species could threaten native species.	Planned habitat creation would increase biodiversity by augmenting existing conservation target areas, which have been designated based on the presence of native species.
Habitats Regulations Assessment should be of all European sites potentially affected by the MWDF, not just those in the county.	The Habitats Regulation Assessment screening report now includes European sites within 15km of the county boundary.
Comments were made about the desirability of Oxfordshire's Biodiversity Action Plan targets being used to inform site options appraisal and that Oxfordshire Wildlife and Landscape Study could be used to help to identify suitable mineral extraction areas.	The use of landscape description units in the Oxfordshire Wildlife and Landscape Stud which reflects geology, topography and soils cannot give more than a broad indication of mineral resources; the BGS maps are conventionally used to identify resources.

Comments on the plan's aims and objectives	
There was broad support for the Minerals aims and objectives. However, there was some concern that the objectives were not sufficiently specific to the characteristics of Oxfordshire.	The minerals vision and objectives have been redrafted to be more specific to Oxfordshire.
Agriculture and forestry should be added to the objectives for restoration	The strategic objectives do not identify specific, appropriate land uses for post mineral restoration.
Suggestion that the objectives should address the protection of the historic environment	Minerals objective 7 now refers specifically to the protection of the natural and built environment and Oxfordshire's distinctive built heritage.
The objectives should be re-ordered to place M3 before M2, to emphasise the importance of using secondary and recycled aggregates over primary aggregates.	All of the minerals objectives are important; their order does not particularly emphasise the importance of one over another.
Comments on Issue 2a – Minerals Provision	
One respondent acknowledged that there may be short term benefits in securing extensions to existing pits but these are small scale and not likely to avoid the need for new 'stand-alone' workings, especially for the supply of soft sand.	This is being considered as part of the draft minerals spatial strategy options.
More work is needed on the impact of further mineral working on local communities in west Oxfordshire.	A review of previous working in W Oxfordshire and S Oxfordshire is taking place.
The Core Strategy is not sufficiently spatial in approach.	Spatial strategy options for mineral working have been drafted for selection of a preferred strategy for inclusion in the revised Core Strategy Preferred Options document.
Some respondents asked whether the Core Strategy takes sufficient account of the Government's targets to increase the supply of secondary and recycled aggregates.	This will be taken into account in determining spatial strategy options for inclusion in the revised Core Strategy Preferred Options document.
Some respondents queried whether the levels of primary aggregates required are realistic.	The sub-regional apportionment for all the counties in the SE is currently under review; Oxfordshire has plentiful reserves of sand and gravel but actual sales have decreased over the last

	few years.
One respondent asked whether the Core Strategy should make the current position clear, that Oxfordshire's sand and gravel land bank is below 7 years.	The adopted Core Strategy will be the statutory land-use plan for 15 years; this information changes annually and would therefore be out of date very quickly.
More emphasis should be placed on the potential for post-mineral restoration to increase biodiversity.	This will be taken into account in policies for inclusion in the revised Core Strategy Preferred Options document.
One respondent suggested that option 2a(i), to identify specific sites for mineral working, should be amalgamated with option 2a (iii), which seeks to identify specific sites for mineral working for the period to at least 2019.	This will be considered when the preferred options are being drafted.
Comments on Issue 2b – Provision for sharp sand and gravel and soft sand	
There was general support for the proposed sub-division of sand and gravel and soft sand.	This sub division is based on the relative proportions of the three previous years' sales and therefore reflects changes in the market.
Some respondents noted that there should be flexibility in the sub-division, with a clear commitment to meeting the sub-regional apportionment of 1.82mtpa and a 7 year landbank.	Noted; flexibility is achieved by sub-dividing the sand and gravel and the soft sand apportionments, based on the three previous years' sales.
Comments on Issue 3a – Strategy for location of sand and gravel working	
There was general support for the strategy and recognition that the strategy made good use of existing infrastructure.	Noted; this will be incorporated when the preferred options are being drafted.
It was suggested that there should be no further working in the Windrush and Evenlode valleys until a comprehensive restoration strategy has been prepared.	The Lower Windrush Valley Project co-ordinates, implements and helps manage projects that aim to improve the landscape, biodiversity and public access.

<p>Some respondents queried why the preferred option did not refer to the potential for extending existing sites in South Oxfordshire, as opposed to only searching for new working in that area.</p>	<p>This will be considered when the preferred options are being drafted.</p>
<p>One respondent suggested that workings within the Central Oxfordshire sub-region should be identified to minimise transport distances.</p>	<p>This is being considered as part of the draft minerals spatial strategy options.</p>
<p>There was general support for the preferred option of seeking sites in the Oxford/Abingdon/Faringdon resource area.</p>	<p>This will be considered when the preferred options are being drafted.</p>
<p>One respondent asked whether extensions to existing workings could be made in the north of the county to continue to provide for soft sand needs in that area.</p>	<p>This is being considered as part of the draft minerals spatial strategy options</p>
<p>Comments on Issue 4 – Strategy for location of Crushed Rock (limestone/ironstone workings)</p>	
<p>Some respondents thought that there should be a greater level of provision for crushed rock, which could be substituted for sand and gravel.</p>	<p>Crushed rock and sand and gravel have different uses in the market and one cannot be substituted for the other.</p>
<p>One respondent suggested that extensions to existing quarries should be encouraged as benefits of this approach outweigh the disadvantages</p>	<p>This is being considered as part of the draft minerals spatial strategy options.</p>
<p>One respondent wanted no further crushed rock quarries to be identified in W Oxfordshire until a full environmental assessment had established that this was feasible.</p>	<p>A sustainability appraisal of the crushed rock spatial strategy will be undertaken, which includes a Strategic Environmental Assessment of proposed working in this area.</p>

Comments on Issue 5a – Provision of Secondary and Recycled Aggregates	
There was overall support for the preferred approach although some respondents suggested this could be improved with additional policy support for the provision of temporary facilities	This will be considered when the preferred options are being drafted.
Some respondents noted that it is difficult to find suitable locations for permanent facilities where noise and dust generation will not cause problems for adjacent residential properties.	
Several respondents noted that the Plan should be clear in setting out to demonstrate how Oxfordshire will achieve the secondary and recycling aggregate targets as required by Policy M2 of the SE Plan.	This will be considered when the preferred options are being drafted.
Comments on Issue 5b – Where Aggregate recycling facilities should be located	
Many respondents noted that the environmental impacts of aggregate recycling should be taken into account in any locational strategy.	This will be considered when the preferred options are being drafted.
Many respondents objected to the use of a sequential approach to the siting of aggregate recycling facilities, especially on the grounds that development in the Green Belt is not precluded by this approach.	This will be considered when the preferred options are being drafted.
Green Belt should only be considered as a final option in a sequential test.	
Some respondents highlighted the advantages of locating secondary and recycled aggregate facilities in active quarries.	This will be considered when the preferred options are being drafted.
One respondent noted that temporary sites should be moved further up any sequential list.	This will be considered when the preferred options are being drafted.

Comments on Issue 6 – Imported Aggregates and Rail Depots	
Additional rail depots should be identified on the basis of acceptable environmental impact, rather than on the basis of demonstrating that a new facility is needed.	It is unlikely that any further rail depots will be identified in the Core Strategy or in the minerals sites DPD.
It was suggested that the preferred approach would be strengthened by committing OCC to meet its sub-regional apportionment from local sources.	This is reflected in the revised objectives for the Core Strategy.
Comments on Issue 7 – Methodology for Identification and Assessment of Areas or Sites for Mineral Working	
Many respondents noted that more clarity in the assessment process is required with respect to the weighting of the different criteria.	This needs to be taken into consideration in drafting the assessment methodology.
It was requested that more recognition be given to the need to safeguard archaeological remains and landscapes.	This needs to be taken into consideration in drafting the assessment methodology.
More emphasis should be placed on avoiding mineral extraction in the Green Belt.	PPG 2 notes that mineral extraction is compatible with the Green Belt as long as high environmental standards are maintained and the site is well restored.
One respondent noted that the proposed methodology intended to rely on a former Structure Plan policy and that it was not considered appropriate to replicate former development plan policies.	The methodology is being updated and amended for the revised Core Strategy.
Comments on Issue 8 – Restoration of Mineral Workings	
Many respondents noted that long term management agreements are vital in securing successful restoration opportunities. An Area Action Plan may bring a balance of social, environmental and economic benefits.	This will be taken into account when development control policies are being drafted for the Core Strategy.

Many respondents felt that the selection of sites for mineral working should be based primarily on the areas which have greatest potential for restoration to improve biodiversity.	This will be taken into consideration in drafting the assessment methodology.
Respondents interested in habitat and wildlife restoration noted that, in light of the restricted amount of available inert fill, fill should be used to enhance post mineral restoration on those sites which would contribute to conservation target areas.	This will be taken into account in drafting policies for mineral restoration.
Consideration could be given to the creation of water bodies in post mineral restoration to provide a local water supply to adjacent communities.	
Comments on Issue 9 – Minimising the Environmental Impacts of Mineral Working and Supply	
There was strong support for the preferred approach for the establishment of buffer zones, but it was felt that rather than leaving the setting of a buffer zone to the planning application stage, it would be useful to establish parameters and guidelines, or even a specific distance for buffer zones in the Core Strategy.	This will be considered when Preferred Options are being drafted.
Comments on Issue 10 – Safeguarding of Minerals	
Only one response was received; the respondent suggested that as well as safeguarding sand and gravel, limestone, ironstone and Fuller’s Earth, the Core Strategy should also safeguard natural stone resources, which may be suitable for maintenance of historic buildings and monuments.	The Council only has a statutory duty to plan for aggregate provision; however, this does need to be taken into account when Preferred Options are being drafted.

Appendix 3 Assessment of options against plan objectives

Objectives

1. Meet requirements for sand and gravel, soft sand and crushed rock
2. Enable continued supply of limestone & ironstone for building & walling stone
3. Provide clear, deliverable, flexible strategy
4. Facilitate environmentally & economically efficient supply of minerals & encourage max recovery of secondary & recycled aggregates
5. Minimise impact of mineral development on climate change; minimise need to travel & areas at risk of flooding
6. Minimise distances aggregates travel by road and impacts of minerals on local communities and environment
7. Protect landscapes, ecological, geological & heritage sites
8. Provide benefits to natural environment and local communities through restoration, contributing to nature conservation, CTAs, landscape character, local recreation
9. Safeguard sand and gravel, crushed rock, building stone and Fuller's Earth
10. Safeguard permanent facilities for secondary and recycled aggregates and for importing aggregates by rail.

Key



Option supports the objective



Option may not support the objective; further work required.



Option does not support or could work against this objective



Option has no impact or relevance to this objective.

Options										Strengths	Weaknesses
February 2010 Sand and gravel option 1a – concentrate sand and gravel extraction northwest/west of Oxford											
1	2	3	4	5	6	7	8	9	10	<p>Good access to A40 and A34 and Oxford</p> <p>Plentiful resources in the area</p> <p>Existing infrastructure at Cassington and in the Lower Windrush Valley</p>	<p>Concentrating all working in this area would have a significant impact on local communities, traffic generation on the A40 and surrounding roads, and potentially on local flooding</p> <p>Potential impact of mineral working upstream from Oxford Meadows</p>
February 2010 Sand and gravel option 1b – concentrate development south east of Oxford											
1	2	3	4	5	6	7	8	9	10	<p>Option area includes existing working areas; efficient use of resources and infrastructure.</p> <p>Area close to markets of Oxford and surrounding towns and has access to A34.</p>	<p>Area unlikely to meet need for aggregates on its own</p> <p>Access from some parts of this area poor.</p> <p>New areas would need to be developed.</p>

February 2010 Sand and gravel option 1c – share the concentration of development between the areas west of Oxford and south east of Oxford											
1	2	3	4	5	6	7	8	9	10	Working in both areas would reduce impacts on any one community and on local roads in any one area.	Provision of aggregates would be concentrated around Oxford and would not meet the needs of markets such as Banbury.
February 2010 Sand and gravel option 2 – to disperse mineral extraction, whilst relating it to markets											
1	2	3	4	5	6	7	8	9	10	Option identifies 5 areas offering flexibility and proximity to a number of markets	No certainty that areas identified are in close proximity to markets; most areas south of county Option includes areas vulnerable to flooding in west Oxfordshire and at Caversham
February 2010 Sand and gravel option 3 – to meet the need during and beyond the plan period											
1	2	3	4	5	6	7	8	9	10	Identifying new, large scale areas for minerals extraction would enable strategic planning of extraction and restoration to take place on a landscape scale. No one area would have to bear the brunt of mineral working	The option identifies 7 areas for working which could potentially have a significant impact on a large number of communities and areas of landscape. Some areas included are vulnerable to flooding and have environmental constraints such as the Clanfield/Bampton area.

February 2010 Soft sand option											
1	2	3	4	5	6	7	8	9	10	The option area includes existing working areas and would enable efficient working using existing infrastructure to take place.	The option area is extensive; could cause planning blight across a large area. The option does not identify an area of resource in the north of the county
February 2010 Crushed rock option											
1	2	3	4	5	6	7	8	9	10	The option identifies three existing areas of working outside the AONBs which would enable efficient use of resources and of existing infrastructure.	The area in the north of the county is extensive and could cause unnecessary planning blight.
Revision of options to take into account findings of appraisal of options against plan objectives, sustainability appraisal, feedback from stakeholder workshops.											
July 2010 Sand and gravel option 1 – concentration on existing working areas											
1	2	3	4	5	6	7	8	9	10	Option is based on existing and recently worked areas; efficient use of resources and of infrastructure Areas identified have good access	Option includes area where mineral working could have effect on Oxford meadows SAC Option includes Radley where access from proposed sites to

											to A34 and A40 and to Oxford	main road network is poor. Some areas have already experienced working over many years.	
July 2010 Sand and gravel option 2 – concentration on new working areas													
1	2	3	4	5	6	7	8	9	10			This option would provide relief for communities which currently experience impacts from mineral working There are plentiful resources in these new areas	Some new areas have poor access and are located far from existing markets and planned residential and economic development. There are extensive archaeological assets in some of the new areas identified.
July 2010 Sand and gravel option 3 – dispersed working													
1	2	3	4	5	6	7	8	9	10			This option could potentially reduce the impact of working on any one area of the county. Potentially it could provide local supplies of aggregates to markets, although the pattern of supply and demand is unclear.	Twelve areas are identified; if all these areas were worked, there could be significant impacts on many communities, local roads and extensive areas of landscape. There is no certainty that this strategy will lead to a reduction in mineral miles; it could have the opposite effect by allowing a large number of small sites in rural locations.

July 2010 Soft sand strategy option											
1	2	3	4	5	6	7	8	9	10	Three smaller areas now make up the soft sand option, based on viable areas of resource. The area at Duns Tew could meet the need for soft sand in the north of the county, reducing mineral miles from the south of the county to markets in the north.	The option is based on existing areas so impacts on local communities are likely to continue in these areas throughout the plan period.
July 2010 Crushed rock strategy option											
1	2	3	4	5	6	7	8	9	10	This option is based around existing working areas, thus making most efficient use of resources and infrastructure.	The area in the north is still fairly extensive.

September 2011 – Draft minerals plan Preferred spatial strategy for sand and gravel: existing areas plus a new area in the south/east of the county to meet planned demand in this area when Sutton Courtenay is exhausted. Options for new areas in the south of the county are:											
Cholsey											
1	2	3	4	5	6	7	8	9	10	Good road access to areas of planned development at Didcot and the Science Vale Enterprise zone Plentiful resources Few environmental constraints No archaeological constraints	Proximity to AONBs Proximity to residential properties
Clifton Hampden											
1	2	3	4	5	6	7	8	9	10	Plentiful resources Few environmental constraints	Poor road access to HGV lorry route; access would be through local villages. Long distances to markets. Proximity to R Thames and national trail Some archaeological assets
Warborough/Benson/Shillingford											
1	2	3	4	5	6	7	8	9	10	Extensive area with plentiful resources, not immediately adjacent to settlements	Archaeological constraints in part of the area Distance from planned development.