

## **Norfolk Minerals and Waste Local Plan**

Minerals Site Specific Allocations Plan –  
Single Issue Silica Sand Review

Initial Consultation feedback Report

June 2015



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June 2015

T. McCabe – Executive Director  
Community and Environmental Services  
Norfolk County Council  
Martineau Lane  
Norwich  
NR1 2SG

[www.norfolk.gov.uk](http://www.norfolk.gov.uk)



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## Introduction

This document contains the responses received to the Initial Consultation on the Single Issue Silica Sand Review of the Minerals Site Specific Allocations Plan. The consultation period ran for six weeks from 9 March to 20 April 2015.

We received comments on the Silica Sand Review from the following 17 organisations and one individual:

- Environment Agency
- Natural England
- Historic England
- Highways England
- Norfolk Wildlife Trust
- Sibelco UK
- Borough Council of King's Lynn and West Norfolk
- Norfolk Coast Partnership
- Grimston Parish Council
- Leziate Parish Council
- Snettisham Parish Council
- South Wootton Parish Council
- Middleton Parish Council
- Marine Management Organisation
- Equality and Human Rights Commission
- Anglian Water
- Worcestershire County Council
- North Yorkshire County Council

These responses are listed under each question that they relate to in the Initial Consultation document. For each response received to each question, the County Council has added an officer response, in the right-hand column.

We also received '**no comment**' responses from the following nine organisations: North Norfolk District Council, Norwich City Council, Breckland District Council, Broadland District Council, South Norfolk District Council, Surrey County Council, Office of Rail Regulation, Bradwell Parish Council, Middle Level Commissioners (Internal Drainage Board)

We received responses to the consultation on the **Sustainability Appraisal Scoping Report** from the following seven organisations: Environment Agency, Sibelco UK, Natural England, Historic England, South Norfolk District Council, Broads Authority, Norwich City Council (no comment)

Responses to the Sustainability Appraisal Scoping Report are grouped by respondent, with the section of the Scoping Report that the response relates to detailed at the start of the representation. For each representation received, the County Council has added an officer response, in the right-hand column.

**Question 1:** Should the Silica Sand Review plan to meet the revised shortfall of 2.45 million tonnes over the plan period, or should a different quantity be planned for? In your answer, please provide information/evidence to support your view.

Rep ID	Representation Details	Norfolk County Council officer response
90355	<p>Respondent: <b>Mr M I Archer [1901]</b> Received: <b>17/03/2015 via letter</b></p> <p>Meeting the revised shortfall should not take precedence over the protection of important landscape, ecological and archaeological sites; if there is any risk to any of these sites, the shortfall should be revised downwards as protecting these sites for future generations must take precedence of the short-term need for silica sand.</p>	<p>Noted. The shortfall that the Silica Sand Review will plan to meet is 2.45 million tonnes. However, once a permitted reserve estimate for silica sand is available for 31/12/2014 then the shortfall figure will be revised.</p> <p>The assessment of the Plan through Sustainability Appraisal will ensure that the economic, social and environmental impacts of the Silica Sand Review are taken into account. The Habitats Regulations Assessment of the Silica Sand Review will ensure that specific sites, preferred areas and/or areas of search will not adversely affect the integrity of European designated nature conservation sites.</p>
90369	<p>Respondent: <b>North Yorkshire County Council (Mr Rob Smith) [16201]</b> Received: <b>07/04/2015 via web</b></p> <p>The Silica Sand Review should plan to meet the revised shortfall of 2.45 million tonnes over the plan period as this quantity will maintain the current levels of production which will provide enough silica sand to maintain the current level of supply to current markets.</p>	<p>Noted. The shortfall that the Silica Sand Review will plan to meet is 2.45 million tonnes. However, once a permitted reserve estimate for silica sand is available for 31/12/2014 then the shortfall figure will be revised.</p>
90384	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b> Received: <b>20/04/2015 via web</b> No specific view.</p>	Noted
90414	<p>Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b> Received: <b>20/4/2015 via Email</b></p> <p>As this question relates to matters outside Natural England's remit we have no comments to make.</p>	Noted

Rep ID	Representation Details	Norfolk County Council officer response
90431	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b>  Received: <b>20/4/2015 via Email</b></p> <p>Sibelco seeks clarification of whether the shortfall is 2.45 million tonnes or 2.6 million tonnes. Provided that Norfolk County Council proposes to review the Site Allocations (Minerals Site Specific Allocations DPD) in 2018 (five years from adoption) and at that point extends the end date of a "rolling" plan beyond 2026 by at least five years to 2031 and preferably ten years to 2036, then Sibelco is content that the current review seeks to fill the identified shortfall to 2026.</p> <p>A further review is critical to ensure an appropriate landbank relevant to the level of investment over time and to ensure there is provision for silica sand in Norfolk beyond 2026.</p>	<p>The shortfall that the Silica Sand Review will plan to meet is 2.45 million tonnes. However, once a permitted reserve estimate for silica sand is available for 31/12/2014 then the shortfall figure will be revised.</p> <p>Norfolk County Council confirms that we propose to review the Minerals Site Specific Allocations Plan in 2018, following a review of the Minerals and Waste Core Strategy. At the point of the review the current end date of the plan (2026) will be extended by at least five years. The purpose of the current Silica Sand Review is simply to meet the shortfall is allocated silica sand sites in the adopted Minerals Site Specific Allocations Plan, due to insufficient suitable sites being submitted to the Minerals Site Specific Allocations Plan process. The Silica Sand Review therefore covers the same plan period as the adopted Core Strategy and Minerals SSA Plan, to the end of 2026.</p> <p>It should be noted that the landbank of permitted reserves for silica sand extraction is calculated on sites with planning permission and therefore is reliant on planning applications being submitted.</p>

**Question 2:** Should enhanced evidence on the potential effects of silica sand extraction on the Roydon Common and Dersingham Bog SAC and Roydon Common and Dersingham Bog Ramsar sites be provided in areas closer than 2km from the SAC/Ramsar, or should a different distance from these sites be used? In your answer, please provide information/ evidence to support your view.

Rep ID	Representation Details	Norfolk County Council officer response
90356	<p>Respondent: <b>Mr M I Archer [1901]</b> Received: <b>17/03/2015 via letter</b></p> <p>The potential effects of silica sand extraction on these very important sites are so severe, especially in terms of draining water from these wetland sites, that a larger area of 5km should be used.</p>	<p>Noted. However, no information has been provided in this response to justify why a distance of 5km in particular should be used. Please see our reply to the consultation response from Natural England overleaf.</p>
90383	<p>Respondent: <b>Grimston Parish Council [9551]</b> Received: <b>17/04/2015 via email</b></p> <p>Two kilometres should be extended to 2.5 kilometres from both Roydon and Dersingham Bog SAC/Ramsar. Much of the value of Roydon Common is gained from the hydrology of the surrounding hills, so removing all or part of any of those hills will destroy the value of the Common! It is doubtful if any potential landowner can provide definitive evidence that this is not the case.</p>	<p>Noted. However, no information has been provided in this response to justify why a distance of 2.5km in particular should be used. Please see our reply to the consultation response from Natural England overleaf.</p>
90385	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b> Received: <b>20/04/2015 via web</b></p> <p>Agree the suggestion endorsed by Natural England and Environment Agency that enhanced evidence is required.</p>	<p>Noted - see our reply to the consultation response from Natural England overleaf.</p>
90408	<p>Respondent: <b>Norfolk Wildlife Trust (Mr John Hiskett) [508]</b> Received: <b>20/4/2015 via Email</b></p> <p>It is our view, following the precautionary principle that all areas in the vicinity of Roydon Common and Dersingham Bog should be excluded from the outset. As has been demonstrated in submissions to the Norfolk Minerals and Waste Site Allocations DPD and at the public inquiry for that plan, these sites are fed by both surface and groundwater and are extremely sensitive to any changes in water chemistry which may result from changes in flow. In view of this, Natural England</p>	<p>Noted. In line with the consultation response from Natural England, the hydrological catchment areas for Roydon Common and Dersingham Bog SAC will be used to determine the area within which enhanced evidence on the potential effects of silica sand extraction on these sites will be required to be provided by the site proposer.</p>

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	<p>advised, regarding MIN 41, in their submission of 29th June 2012 to the Norfolk Minerals and Waste Site Allocations DPD that if there is any impact on water supply to the SAC mire features, impacts could not be mitigated against. Since the public inquiry NWT has gathered further evidence that strongly suggests that there is hydrological connectivity between the land to the north and west of Roydon Common and the important mire habitats on the common, relating to PH values of surrounding fields and those found at calcareous springs within the SAC mire community.</p> <p>Notwithstanding the above, if it is decided that sites within the vicinity of Roydon and Dersingham will be considered, as long as there is enhanced evidence to inform an Appropriate Assessment, the distance criteria should be revisited. The 2km distance is somewhat arbitrary and not based on clear evidence. As a result, we support the view (which we understand Natural England will be taking) that distance criteria for enhanced evidence should relate to hydrological catchments surrounding the designated sites. As a result it may be necessary for NCC to carry out work to establish catchment related criteria in order to inform the HRA for the review.</p>	<p>Preferred areas and/or areas of search for silica sand extraction defined by Norfolk County Council will exclude the hydrological catchments of Roydon Common and Dersingham Bog SAC.</p>
90415	<p>Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b> Received: <b>20/4/2015 via Email</b></p> <p>These designated sites are fed by diffuse groundwater systems (and also surface water). This means that the special features, for which they are designated, are sensitive and vulnerable to changes in water flow and levels and in water chemistry.</p> <p>Using distance criteria alone will not necessarily identify any potential adverse hydrological impacts. Natural England recommends using a hydrological catchment based approach for these designated sites, and avoiding the water catchment area(s).</p> <p>As we consider that most proposals in the vicinity of these sites are likely to have a significant effect on the internationally important interest features of the site, either alone or in combination with other plans and projects, a proposer of a new allocation would need demonstrate clearly, through sound scientific evidence, that there would be no adverse impacts on the international sites.</p> <p>Norfolk County Council, as decision-taker and competent authority, would need to</p>	<p>In accordance with the consultation response from Natural England, the hydrological catchment areas for Roydon Common and Dersingham Bog SAC will be used to determine the area within which enhanced evidence on the potential effects of silica sand extraction on these sites will be required to be provided by the site proposer.</p> <p>Preferred areas and/or areas of search for silica sand extraction defined by Norfolk County Council will exclude the hydrological catchments of Roydon Common and Dersingham Bog SAC.</p> <p>Norfolk County Council is aware that a</p>



Rep ID	Representation Details	Norfolk County Council officer response
	undertake an appropriate assessment to fully assess the implications against the site's conservation objectives to determine there will be no likely significant effect before any new allocation could be accepted.	Habitats Regulations Assessment of the Silica Sand Review is likely to be required.
90457	<p>Respondent: <b>Environment Agency (Ms Louisa Johnson) [16424]</b> Received: <b>23/4/2015 via Email</b></p> <p>We highlight the comments made by Natural England in response to this question as part of their consultation reply (letter dated 20 April 2015). We agree that distance criteria alone may not capture any potential adverse hydrological impacts on these designated sites, and support the use of a hydrological catchment based approach.</p>	Noted - see our reply to the consultation response from Natural England above.
90432	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b> Received: <b>20/4/2015 via Email</b></p> <p>Sibelco is of the view that sufficient evidence was previously provided to allow land in the vicinity of these areas to be allocated. The Inspector did not share this view, even though the only likely potential adverse effects would be water related and the site in question was proposed to be worked dry.</p> <p>Sibelco seeks further guidance from the Council on the definition of "enhanced evidence" and to what extent this is justified to be requested from site promoters. We believe that 2km is an excessive distance to impose around these areas and 250 metres to 500 metres would be more reasonable if "enhanced evidence" is deemed necessary. It can be seen from the map on page 22 of the consultation paper that large areas of the Leziate Beds are excluded by a 2km zone. Also, those opposing the inclusion of sites in proximity to the areas noted in Question 2 should provide robust evidence to support their views.</p>	<p>As stated in Natural England's hearing statement for the Minerals Site Specific Allocations examination in 2013, they consider that the removal of mineral from within the hydrogeological catchments of Roydon Common and Dersingham Bog may affect the water chemistry of the SAC as well as the water supply. Therefore these issues cannot be resolved simply by working the site dry.</p> <p>As stated in paragraph 8.1.2 of the Initial Consultation document, the enhanced evidence required would be evidence demonstrating that significant effects on the qualifying features of the SAC or Ramsar sites would not occur as a result of silica sand extraction. This is justified to be requested from site promoters if they propose a site within the relevant distance of the SAC because it is not practicable for Norfolk County Council to gather this evidence and therefore, in the absence of suitable evidence, Norfolk County Council would not be able to allocate</p>

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		<p>any sites that could potentially adversely affect the designated features of Roydon Common and Dersingham Bog, due to their proximity to these sites.</p> <p>Natural England, the Environment Agency and NWT are in agreement in their consultation responses that the hydrogeological catchments of Roydon Common and Dersingham Bog SAC should be used to determine those areas which should either be excluded from preferred areas/areas of search for silica sand extraction or enhanced evidence provided for specific sites to determine that there will be no likely significant adverse effects on the SAC. The area of the hydrogeological catchments is likely to be greater than 500 metres. It is accepted that this may exclude large areas of the Leziate Beds, but Norfolk County Council has a statutory duty to meet the requirements of the Habitats Directive in relation to the Silica Sand Review.</p> <p>As stated in Natural England's hearing statement for the Minerals Site Specific Allocations examination, it is not necessary, under the Habitats Directive, to identify that the extraction of silica sand from within the hydrogeological catchments of Roydon Common and Dersingham Bog <i>would</i> have a significant effect on the SAC, merely whether there is a risk that it <i>might</i>, in accordance with the precautionary principle.</p>

**Question 3:** Should enhanced evidence on the potential effects of silica sand extraction on the Wash and North Norfolk Coast SAC, The Wash SPA and The Wash Ramsar be provided in areas closer than 250 metres from the SAC/SPA/Ramsar, or should a different distance from these sites be used? In your answer, please provide information/ evidence to support your view.

Rep ID	Representation Details	Norfolk County Council officer response
90386	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b>  Received: <b>20/04/2015 via web</b></p> <p>Agreed, these areas are subject to more careful scrutiny through the Local Plan process and site selection and so they should be for silica sand.</p>	Noted
90409	<p>Respondent: <b>Norfolk Wildlife Trust (Mr John Hiskett) [508]</b>  Received: <b>20/4/2015 via Email</b></p> <p>We support the Natural England view regarding distances required for enhanced evidence from Wash and North Norfolk European sites.</p>	Noted
90416	<p>Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b>  Received: <b>20/4/2015 via Email</b></p> <p>Whilst Natural England agrees that anything closer would require enhanced evidence, it is not entirely clear from the text provided under 8.1.5 why a distance of 250 m from the site boundary has been selected. A 500 m distance may be more appropriate to avoid noise and lighting from extraction activities disturbing birds, which are the main features of these designated sites in The Wash.</p>	<p>It was considered that 250 metres was an appropriate initial distance for enhanced evidence to be required. The decision to propose this distance took into account the potential for mineral extraction to disturb wildlife.</p> <p>Therefore, taking into account the consultation response from Natural England, enhanced evidence will be required for: sites within 250 metres of The Wash and sites at a greater distance where the proposer of the site considers that there is the potential for adverse impacts to The Wash.</p> <p>It should be noted that normal practice in Norfolk is for silica sand extraction sites to not have artificial lighting as all processing takes place at Leziate.</p>

Rep ID	Representation Details	Norfolk County Council officer response
90458	<p>Respondent: <b>Environment Agency (Ms Louisa Johnson) [16424]</b>  Received: <b>23/4/2015 via Email</b></p> <p>We have no specific comment to make at this time in response to this question, but note the comment from Natural England.</p>	Noted
90433	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b>  Received: <b>20/4/2015 via Email</b></p> <p>Sibelco would wish to see a definition of the meaning of "enhanced evidence" before commenting on whether the provision of such evidence is necessary for potential mineral sites within 250 metres of the noted areas is reasonable. Those opposing the inclusion of sites in proximity to the areas noted in Question 3 should provide robust evidence to support their views.</p>	<p>As stated in paragraph 8.1.5 of the Initial Consultation document, the enhanced evidence required would be evidence to show that significant effects on the qualifying features of The Wash and North Norfolk Coast SAC, The Wash SPA and The Wash Ramsar would not occur as a result of silica sand extraction.</p> <p>It is not necessary, under the Habitats Directive, to identify that the extraction of silica sand <i>would</i> have a significant effect on SAC, SPA and Ramsar, merely whether there is a risk that it <i>might</i>, in accordance with the precautionary principle.</p>

**Question 4:** Should enhanced evidence areas for SSSIs be based on the sensitivity of qualifying features to the effects of mineral extraction, or should different criteria be used? In your answer, please provide information/evidence to support your view.

Rep ID	Representation Details	Norfolk County Council officer response
90387	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b>            Received: <b>20/04/2015 via web</b>            As for Q6, the impacts will generally be specific to the type of asset and its location.</p>	<p>The enhanced evidence areas will be based on sensitivity of qualifying features to the effects of mineral extraction.</p>
90410	<p>Respondent: <b>Norfolk Wildlife Trust (Mr John Hiskett) [508]</b>            Received: <b>20/4/2015 via Email</b></p> <p>We agree that enhanced evidence should be based on the sensitivity of features to mineral extraction for each SSSI. This should include consideration of the hydrological catchments of the SSSI, if the site contains water dependent features.</p>	<p>The enhanced evidence areas will be based on sensitivity of qualifying features to the effects of mineral extraction.</p>
90416	<p>Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b>            Received: <b>20/4/2015 via Email</b></p> <p>Natural England agrees that the enhanced evidence areas should be based on the sensitivity of the qualifying features of the SSSI to the effects of mineral extraction.</p>	<p>The enhanced evidence areas will be based on sensitivity of qualifying features to the effects of mineral extraction.</p>
90459	<p>Respondent: <b>Environment Agency (Ms Louisa Johnson) [16424]</b>            Received: <b>23/4/2015 via Email</b></p> <p>We support the comments made by Natural England, and agree that the enhanced evidence areas should be based on the sensitivity of the qualifying features to the effects of mineral extraction.</p>	<p>The enhanced evidence areas will be based on sensitivity of qualifying features to the effects of mineral extraction.</p>
90434	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b>            Received: <b>20/4/2015 via Email</b></p> <p>Sibelco is of the view that "enhanced evidence" should not be required for potential developments in proximity to SSSI's. These sites are designated for many different reasons and sites have different sensitivities. Any evidence required to be provided should be based on the specific sensitivity of the qualifying feature, be proportionate and based on an assessment of likely effects.</p>	<p>Natural England, the Environment Agency and NWT agree with an approach of enhanced evidence being provided for sites based on the sensitivity of qualifying features to the effects of mineral extraction. This approach is also in accordance with the consultation response from Sibelco UK.</p>

**Question 5:** Do you have information on the minimum distances from SSSIs within which an enhanced level of evidence would be required to ensure that harm is not caused to the qualifying features of a SSSI? In your answer, please provide information/evidence to support your view.

Rep ID	Representation Details	Norfolk County Council officer response
90357	<p>Respondent: <b>Mr M I Archer [1901]</b> Received: <b>17/03/2015 via letter</b></p> <p>Rather than seeking evidence for the minimum distances from SSSIs within which an enhanced level of evidence would be required, evidence should be sought to prove a maximum distance from the SSSIs outside of which enhanced local evidence would not be needed: this is the only way to ensure the safety of these sites.</p>	<p>The distances from SSSIs, within which an enhanced level of evidence would be required, will be based on the potential for mineral extraction to impact on the qualifying features of the SSSI. Different distances have been applied to sites with geological qualifying features compared with species or habitat features.</p>
90388	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b> Received: <b>20/04/2015 via web</b></p> <p>No specific evidence.</p>	<p>Noted</p>
90418	<p>Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b> Received: <b>20/4/2015 via Email</b></p> <p>There is no one generic distance that can be prescribed for all the SSSIs potentially affected by the review. The special biological or geological features of interest for which each SSSI has been notified will vary from site to site. This means the impacts from mineral working will differ between each SSSI.</p>	<p>Noted - the enhanced evidence areas will be based on the potential for mineral extraction to have adverse impacts on the qualifying features of the SSSI. Different distances have been applied to sites with geological qualifying features compared with species or habitat features.</p>
90460	<p>Respondent: <b>Environment Agency (Ms Louisa Johnson) [16424]</b> Received: <b>23/4/2015 via Email</b></p> <p>We support the comments made by Natural England in response to this question. Similar to Q4, potential impacts are likely to vary depending on the features of interest.</p>	<p>Noted – see our reply above to the consultation response from Natural England.</p>
90435	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b> Received: <b>20/4/2015 via Email</b></p>	<p>Natural England and the Environment Agency agree with an approach of enhanced evidence being provided for sites based on the</p>

Rep ID	Representation Details	Norfolk County Council officer response
	<p>Sibelco is of the view that no separation distance should be imposed. This can and should be determined during the planning application process. Provided it can be demonstrated, at the site allocation phase, that there is a sufficient lateral extent of proven mineral resource (after the possible setting of required and appropriate stand-off distances from the SSSI) such that mineral can still be extracted without adverse effects and satisfy landbank/allocation targets, then sites should be capable of being allocated in proximity to SSSI's.</p>	<p>sensitivity of qualifying features to the effects of mineral extraction. For example, it is likely that different distances will apply to sites with geological qualifying features compared with species or habitat features.</p> <p>The enhanced evidence areas are not intended to be separation distances. The Silica Sand Review process will need to demonstrate, at the site allocation stage, that there will not be adverse effects on SSSIs from mineral extraction.</p> <p>The impact of mineral extraction on SSSIs would also be assessed at the planning application stage.</p>

**Question 6:** Should enhanced evidence on the potential effects of silica sand extraction on ancient woodland be provided in areas within 15 metres of the ancient woodland, as in the Four Acres appeal, or should a different distance from these sites be used? In your answer, please provide information/evidence to support your view.

Rep ID	Representation Details	Norfolk County Council officer response
90389	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b>  Received: <b>20/04/2015 via web</b></p> <p>There should be consideration of the overall impact on ancient woodland, i.e. the visual and landscape impact. Buffers will depend in this case on the size and type of woodland.</p>	<p>The assessment of proposed silica sand extraction sites will include the effect of extraction operations on the landscape. However, ancient woodland is protected primarily due to their irreplaceable habitat and the areas in which enhanced evidence should be provided for silica sand sites proposed in proximity to ancient woodland will therefore be based on the distance required to assess potential impacts on ancient woodland ecology (see list of potential impacts in Natural England's consultation response) from silica sand extraction.</p>
90419	<p>Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b>  Received: <b>20/4/2015 via Email</b></p> <p>Careful consideration should be given as to whether the proposed 15 m buffer is really adequate to allow a comprehensive assessment to be undertaken of potential impacts on ancient woodland from mineral working. Impacts could include:</p> <ul style="list-style-type: none"> <li>* Fragmentation and loss of ecological connections with surrounding woodland/ veteran trees and the wider natural landscape;</li> <li>* Effects on the root protection area of individual trees;</li> <li>* Reduction in the area of other semi-natural habitats adjoining ancient woodland;</li> <li>* Increased deposition of dust, particularly from quarries, resulting in physical and/or chemical effects; and</li> <li>* Impacts on local hydrology through drainage or water table levels changing.</li> </ul>	<p>The standing advice from Natural England and the Forestry Commission on protecting ancient woodland from development (updated 29 March 2015) states that the Forestry Commission can be consulted on planning proposals within 500 metres of ancient woodland that involve new buildings. Silica sand extraction operations would not involve new buildings.</p> <p>The standing advice also states that a minimum buffer zone of 15 metres of semi-natural habitat between the development and the ancient woodland is generally considered appropriate mitigation.</p> <p>It is recognised that in order to assess the impacts to ancient woodland from dust and potential changes to groundwater due to mineral extraction, a distance greater than 15 metres from the ancient woodland should be used. We</p>



Rep ID	Representation Details	Norfolk County Council officer response
		therefore propose to use a distance of 250 metres as the area in which enhanced evidence would be required because it is considered that dust can be mitigated within this distance. This will also be used as a default distance for hydrology, although it may be that further information from consultees indicates that a greater distance is required.
90436	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b>  Received: <b>20/4/2015 via Email</b></p> <p>This proposed distance for the potential provision of "enhanced evidence" in proximity to ancient woodland appears to be reasonable, subject to details of what would constitute "enhanced evidence".</p>	<p>Noted, however, due to comments received from Natural England, it is considered appropriate to extend the enhanced evidence areas for ancient woodland from 15 metres to 250metres from the boundary of an ancient woodland site, to adequately assess potential hydrological and dust impacts.</p> <p>Enhanced evidence would be evidence to show that loss or deterioration of the ancient woodland would not occur as a result of silica sand extraction.</p>

**Question 7:** Should enhanced evidence on the potential effects of silica sand extraction on heritage assets be provided in areas closer than 250 metres from the heritage asset, or should a different distance from these sites be used? In your answer, please provide information/evidence to support your view.

Rep ID	Representation Details	Norfolk County Council officer response
90358	<p>Respondent: <b>Mr M I Archer [1901]</b> Received: <b>17/03/2015 via letter</b></p> <p>Enhanced evidence should be provided in areas closer than 500 metres from heritage assets.</p>	<p>Noted. However, no information has been provided in this response to justify why 500 metres is more appropriate distance than 250 metres. Taking into account the consultation response from Historic England, enhanced evidence will be required for sites within 250 metres of a heritage asset, sites within the setting of a heritage asset and sites at a greater distance where the proposer of the site considers that there is the potential for adverse impacts to the significance of a heritage asset.</p>
90390	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b> Received: <b>20/04/2015 via web</b></p> <p>As for Q6, the impacts will be specific to the type of asset and its location. A blanket figure is unlikely to be appropriate.</p>	<p>Noted - see our reply to the consultation response from Heritage England.</p>
90420	<p>Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b> Received: <b>20/4/2015 via Email</b></p> <p>As this question relates to matters outside Natural England's remit we have no comments to make.</p>	<p>Noted</p>
90437	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b> Received: <b>20/4/2015 via Email</b></p> <p>While "enhanced evidence" in proximity to protected sites such as Ramsar sites, SAC's and SSSI's can be targeted on specific elements such as surface water, groundwater, dust etc. this is not necessarily the case for heritage assets. It is not clear whether this question relates to only designated heritage assets or all</p>	<p>The distance for enhanced evidence was not intended to be a stand-off or separation distance. They are distances within which additional evidence was considered likely to be necessary in order to justify specific site allocations.</p>

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	<p>heritage assets. The NPPF is clear in that when "considering the impact of a proposed development on the significance of a designated (our underlining) heritage asset, great weight should be given to the asset's conservation". However NPPF also states that LPA's must give "great weight to the benefits of the mineral extraction, including to the economy". It is therefore critical that appropriate balance is given to any judgement at the time of application.</p> <p>In terms of buried heritage assets, these are of course not likely to be evident until at least pre-application assessment and more fully assessed during operational phases of development. Quarries provide excellent opportunities for the detailed investigation of buried heritage assets.</p> <p>In terms of other heritage assets, Sibelco is of the view that specifying distances for "enhanced evidence" is not appropriate due to the many and varied types of heritage asset and the different ways in which a mineral development could potentially affect such an asset e.g. its setting. Heritage assets should be assessed on a case by case basis and not using an arbitrary stand-off distance.</p> <p>In all considerations, it should be recognised that Silica Sand is defined as a Nationally Important Mineral in NPPF.</p>	<p>Decision makers in planning are required to have 'special regard' to the desirability of preserving heritage assets such as listed buildings. It is agreed that heritage assets and the potential for impacts on them from mineral extraction need to be considered on a case by case basis. However, in order to justify the allocation of specific sites in proximity to heritage assets it is considered that sufficient evidence will be required to assess whether a site is appropriate.</p> <p>Initially, it was considered that extraction within 250m of a heritage asset was likely to need to consider potential impacts on those assets and was a proportionate initial position. This was based on a planning appeal for mineral extraction in Norfolk. It was recognised that some heritage assets and their settings would require different treatment. Therefore, taking into account the consultation response from Historic England, enhanced evidence will be required for: sites within 250 metres of a heritage asset, sites within the setting of a heritage asset and sites at a greater distance where the proposer of the site considers that there is the potential for adverse impacts to the significance of a heritage asset.</p> <p>As part of the assessment of sites proposed, officers will consult with bodies such as Historic England and the Norfolk Historical Environment Service. If it is considered that insufficient evidence has been provided to</p>

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		reach a conclusion on the acceptability of a site for allocation the proposer of the site will be asked to provide additional evidence. If proportionate evidence is not provided it is unlikely that an allocation could be justified.
90469	<p>Respondent: <b>Historic England (Kayleigh Wood) [15387]</b> Received: <b>28/04/2015 via Email</b></p> <p>We support the acknowledgement of designated heritage assets, we are particularly concerned that no reference is made to non-designated heritage assets, most specifically at point 9.1 on page 31. The historic environment of the site in question is more than just the sum of its designated heritage assets; non-designated assets make up an important and valued part of this and it is important they are acknowledged. Their protection is also required by the NPPF. Therefore they should be reflected within the Single Issue Silica Sand Review. Details of such assets are held on the Norfolk's Historic Environment Record (HER) and Local Lists compiled by Local Authorities.</p> <p>Turning to the proposed 250 metres boundary specifically, we do have concerns regarding the use of an arbitrary boundary when assessing whether further detailed assessment would be required in relation to the impact on specific sites. While setting can be mapped in the context of an individual application or proposal, it does not have a fixed boundary and cannot be definitively and permanently described for all time as a spatially bounded area or as lying within a set distance of a heritage asset. What comprises a heritage asset's setting may change as the asset and its surroundings evolve or as the asset become better understood or due to the varying impacts of different proposals; for instance, new understanding of the relationship between neighbouring heritage assets may extend what might previously have been understood to comprise setting. In addition, setting can be interrupted by natural screening, which can alter overtime, severe changes in topography or open landscapes, or the existence of (or conversely lack of) other development in the surrounding area. As a result, the setting of one Heritage Asset will not be the same for another; setting will therefore be much wider than 250m in some instances and could be much smaller in others.</p>	<p>We recognise that the historic environment is made up of designated and non-designated assets and their respective settings. It was considered that, designated heritage assets would be of greatest significance, especially in the context of the national importance of silica sand and its extraction. The site allocation process must determine whether a site is acceptable in principle. However, we recognise that non-designated heritage assets and assets subject to local listing also need to be considered and information on these will be considered in assessing sites and areas in future stages of the Silica Sand Review.</p> <p>Initially, it was considered that extraction within 250m of a heritage asset was likely to need to consider potential impacts on those assets and was a proportionate initial position. This was based on a planning appeal for mineral extraction in Norfolk. It was recognised that some heritage assets and their settings would require different treatment. Therefore, taking into account the consultation response from Historic England, enhanced evidence will be required for: sites within 250 metres of a heritage asset, sites within the setting of a heritage asset and sites at a greater distance where the proposer of the site considers that</p>

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	<p>As well as setting it is also important to understand the significance of any heritage assets affected. This involves more than identifying known heritage assets within a given distance, but rather a more holistic process which seeks to understand their significance and value. Whilst a useful starting point, the use of distance or visibility alone as a gauge of impact is not appropriate. We would therefore object to the use of a 250m boundary as this would not result in robust evidence gathering. Each site would need to be judged on a site by site basis and the methodology adjusted to account for this.</p> <p>Further advice on the importance of setting can be seen here:  <a href="http://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/">http://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/</a>.</p> <p>Further advice on significance can be seen here:  <a href="http://historicengland.org.uk/images-books/publications/gpa2-managing-significance-in-decision-taking/">http://historicengland.org.uk/images-books/publications/gpa2-managing-significance-in-decision-taking/</a>.</p>	<p>there is the potential for adverse impacts to the significance of a heritage asset.</p> <p>As part of the assessment of sites proposed, officers will consult with bodies such as Historic England and the Norfolk Historical Environment Service. If it is considered that insufficient evidence has been provided to reach a conclusion on the acceptability of a site for allocation the proposer of the site will be asked to provide additional evidence. If proportionate evidence is not provided it is unlikely that an allocation could be justified.</p>

**Question 8:** Does consultation with English Heritage and the Norfolk Historic Environment Service provide an appropriate method for ascertaining the likely archaeological importance of proposed Specific Sites, designated Preferred Areas and/or Areas of Search, and potentially acceptable methods of protection/mitigation? Please provide information/evidence to support your view.

Rep ID	Representation Details	Norfolk County Council officer response
90359	<p>Respondent: <b>Mr M I Archer [1901]</b>            Received: <b>17/03/2015 via letter</b>            Yes: these are nationally respected bodies.</p>	Noted
90391	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b>            Received: <b>20/04/2015 via web</b>            In broad terms it would form a starting point.</p>	Noted
90421	<p>Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b>            Received: <b>20/4/2015 via Email</b>            As this question relates to matters outside Natural England's remit we have no comments to make.</p>	Noted
90438	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b>            Received: <b>20/4/2015 via Email</b></p> <p>Yes - in conjunction with appropriate levels of technical discussion with heritage specialists acting for and on behalf of the site promoter /mineral operator. Consultation would now be with Historic England. Reference should also be made to the CBI Archaeological Investigations Code of Practice and the Minerals and Historic Environment Forum "Mineral Extraction and Archaeology: A Practice Guide".</p>	Noted
90470	<p>Respondent: <b>Historic England (Kayleigh Wood) [15387]</b>            Received: <b>28/04/2015 via Email</b></p> <p>Once the evidence gathering is complete it is considered that consultation with Historic England and the Norfolk Historic Environment Service is appropriate. Please note that all reference to 'English Heritage' within the document should be changed to 'Historic England'. The organisation has been divided into two, English Heritage being responsible for the charity's properties and Historic England being responsible for government advice on the Historic Environment. We would also encourage you to work with local conservation and archaeology officers in the preparation of the Single Issue Silica Sand Review.</p>	Noted

**Question 9:** Should enhanced evidence on the potential effects of silica sand extraction on amenity be provided in areas closer than 125 metres from sensitive receptors, recognising that this does not represent a potential standoff distance which will be determined on a case by case basis, or should a different distance be used? In your answer, please provide information/evidence to support your view.

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90360	<p>Respondent: <b>Mr M I Archer [1901]</b> Received: <b>17/03/2015 via letter</b></p> <p>Enhanced evidence in areas closer than 125 metres from buildings such as dwellings insufficient and a distance of 500 metres should be used.</p>	<p>Noted. However, no information has been provided in this response to justify why 500 metres is more appropriate distance than 125 metres. The Borough Council of King's Lynn and West Norfolk, which has the statutory responsibility for environmental health, have agreed with the 125 metres proposed. However, we have decided that enhanced evidence on the potential effects of silica sand extraction on amenity will be needed for specific sites proposed within 250 metres of sensitive receptors. This distance is consistent with the consultation areas used in Core Strategy Policy CS16, in which Local Planning Authorities should consult Norfolk County Council on non-mineral development in proximity to mineral extraction sites. It is therefore considered that 250 metres from a modern extraction site, with appropriate mitigation measures controlled by condition, should not result in unacceptable amenity impacts.</p>
90392	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b> Received: <b>20/04/2015 via web</b></p> <p>The Borough Council of King's Lynn &amp; West Norfolk would endorse the enhanced evidence on the potential effects of silica sand extraction on amenity to be provided in areas closer than 125 metres from sensitive receptors such as healthcare facilities, schools and dwellings.</p>	<p>Noted. However, we have decided that enhanced evidence on the potential effects of silica sand extraction on amenity will be needed for specific sites proposed within 250 metres of sensitive receptors. This distance is consistent with the consultation areas used in Core Strategy Policy CS16, in which Local Planning Authorities should consult Norfolk County Council on non-mineral development in proximity to mineral extraction sites. It is therefore considered that 250 metres from a modern extraction site, with appropriate mitigation measures controlled by condition, should not result in unacceptable amenity impacts.</p>

Rep ID	Representation Details	Norfolk County Council officer response
90422	<p>Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b>  Received: <b>20/4/2015 via Email</b></p> <p>As this question relates to matters outside Natural England's remit we have no comments to make.</p>	Noted.
90439	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b>  Received: <b>20/4/2015 via Email</b></p> <p>Sibelco is of the view that "enhanced evidence" is not appropriate and not required within 125 metres from sensitive receptors and would seek clarification of the source of what appears to be an arbitrary distance. This is because "sensitive receptors" could be taken by some to refer to very many situations, possible including rights of way. The potential effects on "sensitive receptors" may be many and diverse although all will be capable of mitigation during the planning application process at which time separation distances may be set if required. The EIA will clearly define "sensitive receptors" and the iterative process will reduce or eliminate negative effects by design and operational management.</p>	<p>Following the Initial Consultation, we have decided that enhanced evidence on the potential effects of silica sand extraction on amenity will be needed for specific sites proposed within 250 metres of sensitive receptors. This distance is consistent with the consultation areas used in Core Strategy Policy CS16, in which Local Planning Authorities should consult Norfolk County Council on non-mineral development in proximity to mineral extraction sites. It is considered that 250 metres from a modern extraction site, with appropriate mitigation measures controlled by condition, should not result in unacceptable amenity impacts. It is noted that Sibelco have not suggested an alternative distance to be used.</p> <p>The intention is that for the assessment of specific sites, enhanced evidence will be required for specific sites located within 250 metres of sensitive receptors such as dwellings, healthcare facilities and schools. It is not the intention that an assessment of amenity impacts will be required for proposed specific sites located within 250 metres of rights of way. This will be clarified in the 'call for sites' documentation.</p> <p>It is appreciated that amenity impacts will be assessed in detail as part of a planning application, and through an Environmental Statement if one if required. However, site specific allocations will also need to be assessed for their suitability in terms of potential impacts on amenity as part of the preparation and through the sustainability appraisal of the plan.</p>



**Question 10:** Should allocated sites and sites with planning permission for non-mineral uses that are located in or adjacent to the silica sand resource be excluded from Preferred Areas or Areas of Search, or should a different approach be taken? In your answer please provide information/evidence to support your view.

Rep ID	Representation Details	Norfolk County Council officer response
90403	<p>Respondent: <b>South Wootton Parish Council (Mr D Price) [16422]</b> Received: <b>17/04/2015 via letter</b></p> <p>We have particular concern regarding the potential silica sand resources underlying the boundaries of the Parish, i.e. in the Knight's Hill area on the north-east outskirts of King's Lynn, which lies within the administrative boundary of the Borough Council of King's Lynn and West Norfolk. The area, itself, lies within the parishes of Castle Rising, South Wootton and the Gaywood ward of King's Lynn. In their 'Site Allocations and Development management Policies Pre-Submission Document' the Borough Council refers in paragraph E4.26 and policy E4.1 part A (d) to the possible presence of silica sand on the site. However, at the present time they are proposing an allocation of up to 600 new houses to be built on the Knight's Hill site.</p> <p>The Parish Council suggests that the opportunities are taken to investigate whether the reserves that exist should be explored further and extracted, if necessary, before allocating the site for development. We are concerned that the consultation documents of the two authorities may be in conflict and that the Borough Council may have failed in their duty-to-cooperate with Norfolk County Council as the Mineral and Waste Planning Authority, with respect to this strategic issue - in respect of silica sand reserves and how these may or may not affect the Borough Council's emerging site allocations.</p> <p>South Wootton Parish Council contend that it is only reasonable to adopt the precautionary principle and assume silica sand deposits are under the Knight's Hill site, which would require extraction prior to any development.</p>	<p>As stated in paragraph 10.6 of the Initial Consultation document, mineral safeguarding assessments have already been carried out for proposed housing sites close to the Knight's Hill roundabout and these assessments have proved that no silica sand of commercial interest occurs at these locations. Therefore there would be no requirement for silica sand to be extracted from the Knight's Hill site prior to any non-mineral development taking place on the site.</p> <p>Therefore Norfolk County Council does <b>not</b> consider that the Borough Council of King's Lynn and West Norfolk have failed in their duty-to-cooperate with Norfolk County Council as the Mineral Planning Authority and does not consider that the authorities' consultation documents are in conflict in this regard.</p>
90393	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b> Received: <b>20/04/2015 via web</b></p> <p><b>Summary</b> The Borough Council would support the approach to exclude allocations made in</p>	<p>Support noted.</p>

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	<p>the Borough Council plan documents from areas of search.</p> <p>The role of the Borough Council of King's Lynn &amp; West Norfolk is seen as in part to seek a reasonable balance between the requirements of the Norfolk Minerals and Waste Core Strategy Policy CS16, to safeguard the mineral resources, whilst not preventing other non-minerals development from proceeding where it is in accordance with the Borough's adopted Core Strategy policies. Given that silica sand is a nationally important but scarce resource, Norfolk's silica sand resources does need to be safeguarded from inappropriate development proposals.</p> <p>The Borough Council of King's Lynn &amp; West Norfolk's preferred options in the Site Specific Allocations and Policies Development Plan (Submission version) document suggest that an urban extension use will be far more appropriate use of the land in question at Knight's Hill, West Winch and Downham Market than mineral use (using as a starting point the BGS extents) given its location and nature. The areas have been indicated through the Core Strategy, and as detailed specific areas have been through extensive consultation.</p> <p>According to the Chapter 10 on Amenities in the Single Issue Silica Sand Review document, allocated sites and sites with planning permission for non-mineral uses that are located in or adjacent to the silica sand resource will be excluded from Preferred Areas and Areas of Search. This approach from the County Council will enable future growth in the Borough planned in the areas set out in the Site Allocations and Development Management Policies. The Borough Council of King's Lynn &amp; West Norfolk agree with this proposal from Norfolk County Council.</p> <p><b>Conclusion:</b> The Borough Council of King's Lynn &amp; West Norfolk considers that the proposals set out in the Minerals Site Specific Allocations Plan-Single Issue Silica Sand Review which do not prevent non-minerals development from proceeding where it is in accordance with the Borough's adopted Core Strategy policies should be welcomed.</p>	<p>Noted</p> <p>Norfolk County Council have responded to the representations period on the Pre-Submission version of the King's Lynn and West Norfolk Site Specific Allocations document regarding the relationship between Mineral Safeguarding Areas, Policy CS16 on safeguarding and the non-mineral allocations proposed at Knight's Hill, West Winch and Downham Market.</p> <p>Agreement noted. However, the intention is that non-minerals allocations will only be excluded from the preferred areas/areas of search for silica sand extraction subject to the non-mineral site allocations being contained in an adopted Plan. In addition, Policy CS16 on mineral safeguarding areas would still apply to the non-mineral allocations, as stated in paragraph 10.5 of the Initial Consultation document.</p> <p>Support noted. However, as stated above, this is subject to the inclusion of the non-minerals site allocations in an adopted Plan and Policy CS16 on mineral safeguarding areas would still apply to the allocated sites.</p> <p>It should be noted that the maps on pages 53 and 54 of the Silica Sand Review Initial Consultation document only exclude the proposed non-minerals site allocations at Knight's Hill, West Winch and</p>

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	<p>For clarification the maps on pages 53 and 54 from the Single Issue silica Sand Review - Initial Consultation document, illustrate how the areas of Knight's Hill, West Winch and Downham Market are located in areas of silica sand resource proposed to be excluded from Preferred Area/ AoS process and as a result enable site allocations from the Borough Council of King's Lynn and West Norfolk to proceed.</p>	<p>Downham Market due to other planning constraints, which are detailed below.</p> <p>Land at Knight's Hill is within 2km of Roydon Common SAC and Ramsar site. Part of the land at Knight's Hill is also within 125 metres of existing residential development.</p> <p>Land at West Winch is on grade 2 agricultural land. Part of the land is also within 125 metres of existing residential development.</p> <p>Land allocated to the north east of Downham Market is partly within 125 metres of existing residential development. This land is also grade 3 agricultural land. However, taking into account the consultation responses, we no longer plan to exclude grade 3 agricultural land from preferred areas/areas of search for silica sand extraction.</p> <p>Land allocated to the south east of Downham Market is partly within 125 metres of existing residential development. It is also grade 2 agricultural land.</p> <p>The intention is that the non-mineral site allocations will be excluded from preferred areas/areas of search for silica sand extraction when they are contained in an adopted Plan (or have planning permission), as stated in paragraph 10.5 of the Initial Consultation document.</p>
90423	<p>Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b>  Received: <b>20/4/2015 via Email</b>  As this question relates to matters outside Natural England's remit we have no comments to make.</p>	Noted
90440	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b>  Received: <b>20/4/2015 via Email</b></p>	We confirm that this refers to allocated sites for non-mineral development in the Borough Council of King's Lynn and West Norfolk's Local Plan,

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	<p>Sibelco assumes this refers to allocated sites in the KL&amp;WN Borough Council plan (for non-mineral development). We are unclear how a Borough Council local plan could have allocations and consents for non-mineral development on land which would presumably be safeguarded for minerals if the land was otherwise to be considered by Norfolk County Council for either Preferred Sites or Areas of Search.</p> <p>Core Strategy Policy CS16 - Safeguarding mineral and waste sites and mineral resources indicates that the Mineral Planning Authority will expect to see appropriate investigations carried out to assess whether any mineral resource within such an area is of economic value, and if so, whether the material could be economically extracted prior to the development taking place.</p> <p>Sibelco is of the view that since the areas in question must be located where potential silica sand is present then these areas should not be excluded from any Preferred Sites or Areas of Search</p> <p>Sibelco agrees that no buffers should be imposed around sites with planning permissions or allocations for non-mineral development with any buffers, if required, to be determined on a case by case basis.</p>	<p>specifically in the 'Site Allocations and Development Management Policies Document'.</p> <p>Due to the Submission of the King's Lynn and West Norfolk 'Site Allocations and Development Management Policies Document' to the Secretary of State in April 2015 it is considerably more advanced that the Silica Sand Review of the Minerals Site Specific Allocations Plan. Therefore it is expected that the King's Lynn and West Norfolk Site Allocations Document will be examined and adopted prior to the examination and adoption of the Silica Sand Review.</p> <p>Where sites have been proposed to be allocated in the King's Lynn and West Norfolk Site Allocations Document that are located on the Mineral Safeguarding Area for silica sand Norfolk County Council have requested the specific site allocation policy to include a requirement for investigation and prior extraction in accordance with Core Strategy Policy CS16.</p> <p>As stated in paragraph 10.5 of the Initial Consultation document, allocated sites would be excluded from a preferred area/area of search for silica sand extraction and if these sites contain a silica sand resource that can be economically extracted prior to mineral development taking place then this would be dealt with in accordance with policy CS16 on safeguarding.</p> <p>The agreement to the proposal not to put buffers around allocations or sites with planning permission for non-mineral development is noted.</p>

**Question 11:** Should agricultural land grades 1, 2 and 3 be removed from consideration as potential Preferred Areas or Areas of Search for future silica sand extraction? Please supply information/evidence to support your view.

Rep ID	Representation Details	Norfolk County Council officer response
90394	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b>  Received: <b>20/04/2015 via web</b></p> <p>A balance needs to be struck between the productive value of the agricultural land and the importance of the silica sand resource. Grades 1, 2, and 3 are important.</p>	<p>Noted – see our responses below.</p>
90411	<p>Respondent: <b>Norfolk Wildlife Trust (Mr John Hiskett) [508]</b>  Received: <b>20/4/2015 via Email</b></p> <p>Our remit doesn't cover agricultural land but owing to the limited nature of the mineral resource it is our view that the value of agricultural land should not be set equal within the plan to that of designated nature conservation sites of European and national importance, but considered as areas to be avoided where possible in accordance with paragraph 112 of the NPPF. A distinction should also be made between grade 3a and 3b, as only 3a (along with grades 1 and 2) is considered Best and Most Versatile agricultural land.</p>	<p>The comment regarding the importance of nature conservation sites designated at a European or national level, compared to the value of agricultural land is recognised. In light of the consultation responses from NWT and Natural England on this matter, preferred areas/areas of search for future silica sand extraction are now only planned to exclude agricultural land grades 1 and 2.</p> <p>Norfolk County Council is aware that only grades 1, 2 and 3a are considered as BMV agricultural land. However, as stated in paragraph 11.2 of the Initial Consultation document, the sub-grades of 3a and 3b are not mapped and therefore it is not possible for Norfolk County Council to differentiate between sub-grades 3a and 3b when defining preferred areas or areas of search.</p>
90424	<p>Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b>  Received: <b>20/4/2015 via Email</b></p> <p>We recommend that Best and Most Versatile (BMV) agricultural land (grades 1, 2, and 3a within the Agricultural Land Classification) is considered as part of the criteria. In accordance with Paragraph 112 of the NPPF impacts to BMV agricultural</p>	<p>In light of the consultation responses from Natural England, NWT and Sibelco on this matter, preferred areas/areas of search for silica sand extraction are now only planned to exclude agricultural land grades 1 and 2.</p>

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	<p>land should be avoided where possible but it may not be possible to avoid them completely (i.e. if many of the candidate sites are found to contain BMV agricultural land). In accordance with paragraph 143 of the NPPF, where impacts to BMV agricultural land cannot be avoided its long term potential should be maintained through site restoration. To adequately consider impacts to Best and Most Versatile agricultural land it may be necessary to carry out site specific soil surveys where these are not already available; these should follow Natural England Technical Information Note 049 - Agricultural Land Classification: protecting the best and most versatile agricultural land.</p>	<p>However, it should be recognised that when defining preferred areas/areas of search for future silica sand extraction it will not be possible for Norfolk County Council to carry out soil surveys.</p> <p>Policy DM16 of the adopted Norfolk Minerals and Waste Core Strategy explains how planning applications for mineral extraction on BMV agricultural land will be dealt with.</p>
90441	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b> Received: <b>20/4/2015 via Email</b></p> <p>No - Historically national guidance for silica sand notes that development would not be inappropriate on higher grade soils (better than grade 3B). The fact that silica sand may exist in an area does not mean that soils overlying will necessarily be of lower quality. Silica sand may have a clay overburden resulting in increased water retention and higher grade soils. To restrict potential supply of silica sand to area with only grade 4 and 5 (possible also including grade 3B) is likely to severely restrict opportunities to deliver the required tonnage for any plan period and ensure continuity of supply of a nationally important mineral.</p> <p>Sibelco acknowledges paragraph 11.5 whereby the Council would seek evidence that any silica sand resource was of commercial interest for industrial uses in cases where higher grade soils are present. However, Sibelco does not agree that in the event of insufficient specific sites coming forward that Norfolk County Council should exclude all land with agricultural grades 1, 2 and 3 not least because the level of detail on soils quality available to the Council is likely to be very limited with no differentiation of grade 3 into 3A and 3B.</p>	<p>Following the consultation responses received from NWT, Natural England and Sibelco regarding agricultural land, preferred areas/areas of search for future silica sand extraction are now only planned to exclude agricultural land grades 1 and 2. These agricultural land grades affect a significantly smaller area of the silica sand resource.</p>

**Question 12:** Should land in flood zones 2 & 3 be removed from consideration as potential Preferred Areas or Areas of Search for future silica sand extraction? Please supply information/evidence to support your view.

Rep ID	Representation Details	Norfolk County Council officer response
90395	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b>            Received: <b>20/04/2015 via web</b>            There may be technical extraction issues that influence this position?</p>	<p>The only silica sand operator in Norfolk (Sibelco UK) has not raised any concerns in their consultation response, regarding silica sand extraction from land in flood zones 2 &amp; 3.</p>
90425	<p>Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b>            Received: <b>20/4/2015 via Email</b>            As this question relates to matters outside Natural England's remit we have no comments to make.</p>	<p>Noted</p>
90442	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b>            Received: <b>20/4/2015 via Email</b></p> <p>No - mineral development is not incompatible with flood risk and a well-designed restoration scheme provides opportunity for mineral extraction to increase flood storages areas. Working in river valleys can have positive effects and well managed operations will not adversely affect water quality.</p>	<p>Noted. As the Environment Agency have responded that land in flood zones 2 and 3 do not need to be removed from consideration for silica sand extraction, land in flood zones 2 and 3 will not be removed from consideration as potential preferred areas or areas of search for future silica sand extraction.</p>
90461	<p>Respondent: <b>Environment Agency (Ms Louisa Johnson) [16424]</b>            Received: <b>23/4/2015 via Email</b></p> <p>No, sites in flood zones 2 and 3 do not need to be removed from consideration on flood risk grounds; however a sequential approach should be taken to site selection.            Sand and Gravel working is considered to be a 'Water compatible' development as set out by the Planning Practice Guidance. Therefore Silica Sand works would be appropriate in all flood zones, subject to a Flood Risk Assessment being carried out which demonstrates that the proposal does not result in a unacceptable flood risk to the site itself and without increasing flood risk elsewhere. A Warning &amp; Evacuation Plan should also be developed to ensure the safety of people on site.            We support part 12 of the Initial Consultation Document which sets out how sites in flood zones 2 and 3 would be considered in flood risk terms.</p>	<p>Noted. The criteria for land to be defined as a preferred area or area of search will be amended in accordance with this response so that land in flood zones 2 and 3 is not excluded from these areas when they are defined by Norfolk County Council.            It should be noted that the maps on pages 51 to 54 of the Initial Consultation document do not exclude land in flood zones 2 and 3.</p>

**Question 13:** Are there any areas not shown as previous workings on the map which have been worked to the full extent of all commercially viable deposits of silica sand? Please supply evidence/information to support your view and a plan to show the area which should be removed from consideration in this review.

Rep ID	Representation Details	Norfolk County Council officer response
90396	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b>  Received: <b>20/04/2015 via web</b></p> <p>No specific response.</p>	Noted
90426	<p>Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b>  Received: <b>20/4/2015 via Email</b></p> <p>As this question relates to matters outside Natural England's remit we have no comments to make.</p>	Noted
90443	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b>  Received: <b>20/4/2015 via Email</b></p> <p>There are areas shown as worked out on the map on page 45 which are not exhausted of silica sand.</p>	Noted. A map has subsequently been requested and provided by Sibelco UK to show where the specific areas that are referred to in their response are located. This will enable the maps to be updated as appropriate, if Sibelco considers that these areas should not be excluded from a preferred area or area of search for future silica sand extraction.



**Question 14:** Should proposals for Specific Sites for silica sand extraction be considered from within the carstone resource, if suitable evidence is provided regarding the quality and grade of silica sand on the site? Please provide evidence/information to support your view.

Rep ID	Representation Details	Norfolk County Council officer response
90361	<p>Respondent: <b>Mr M I Archer [1901]</b> Received: <b>17/03/2015 via letter</b></p> <p>If sufficient suitable sites cannot be identified without risk to important landscape, ecological and archaeological sites, and if the shortfall cannot be revised downwards, then other areas should be considered including from within the carstone resource.</p>	<p>Noted. Norfolk County Council are willing consider proposals for Specific Sites for silica sand extraction from outside the silica sand surface deposits (Mintlyn and Leziate Beds), as mapped by BGS, if suitable evidence is provided regarding the quality and grade of silica sand on the site.</p>
90397	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b> Received: <b>20/04/2015 via web</b></p> <p>No specific response.</p>	<p>Noted</p>
90427	<p>Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b> Received: <b>20/4/2015 via Email</b></p> <p>As this question relates to matters outside Natural England's remit we have no comments to make.</p>	<p>Noted</p>
90444	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b> Received: <b>20/4/2015 via Email</b></p> <p>Yes - this is effectively the sub-crop of the silica sand in the Leziate Beds lying beneath the Carstone and other deposits. These sub-crop areas also need safeguarding and go beyond the Leziate Beds outcrop as depicted by the BGS. Stripping ratios of at more than 1:1 overburden to silica sand can be commercially developed.</p> <p>The consideration of safeguarding, allocation and provision of Specific Sites should not only consider Carstone but also other deposits which overly the Leziate Beds and the wider Lower Cretaceous silica sand resource as mapped by the BGS.</p>	<p>The Silica Sand Review is not reviewing the Mineral Safeguarding Areas which were defined through the Core Strategy Key Diagram and mapped in more detail in the Policies Map accompanying the Minerals Site Specific Allocations. Sibelco did not make representations that any additional areas should form part of the Mineral Safeguarding Area at that stage.</p> <p>Norfolk County Council are willing to consider proposals for Specific Sites for silica sand extraction from outside the silica sand (Mintlyn</p>

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		and Leziate Beds) and carstone surface deposits, as mapped by the BGS, if suitable evidence is provided regarding the quality and grade of silica sand on the site.

**Question 15:** Should defined Preferred Areas and Areas of Search only include the silica sand resource which is within the Leziate beds, or should the whole silica sand resource, as mapped by the BGS, be included? Please provide evidence/information to support your view.

Rep ID	Representation Details	Norfolk County Council officer response
90362	<p>Respondent: <b>Mr M I Archer [1901]</b> Received: <b>17/03/2015 via letter</b></p> <p>If sufficient suitable sites cannot be identified without risk to important landscape, ecological and archaeological sites, and if the shortfall cannot be revised downwards, then the whole silica sand resource should be included.</p>	<p>The purpose of the Silica Sand Review is to meet the shortfall in allocated sites suitable for the production of glass sand as required by the existing processing facility.</p> <p>In addition, there exist, permitted sites for silica sand extraction located in the Mintlyn Beds which are currently mothballed.</p> <p>Therefore, it is intended that preferred areas/areas of search for silica sand extraction defined by Norfolk County Council will only include the Leziate Beds, as mapped by BGS.</p>
90398	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b> Received: <b>20/04/2015 via web</b> No specific response.</p>	Noted
90428	<p>Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b> Received: <b>20/4/2015 via Email</b> As this question relates to matters outside Natural England's remit we have no comments to make.</p>	Noted
90445	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b> Received: <b>20/4/2015 via Email</b></p> <p>The whole silica sand resource must be the basis of defining Preferred Areas and Areas of Search (and Specific Sites) since the Mineral Planning Authority is conducting a silica sand review not a silica glass sand review.</p>	<p>Paragraph 146 of the NPPF states that MPAs should plan for a steady and adequate supply of industrial minerals by providing a stock of permitted reserves to support the level of actual and proposed investment required for new or existing plant and the maintenance and improvement of existing plant and equipment.</p> <p>Paragraph 27-090-20140306 of the NPPG states that the required stock of permitted reserves for</p>

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		<p>each silica sand site should be based on the average of the previous 10 years sales. The calculations should have regard to the quality of the sand and the use to which the material is put.</p> <p>This guidance means that the requirement for Norfolk County Council to plan for silica sand is directly linked to the purpose of the processing plant operated by Sibelco at Leziate. The purpose of the processing plant is to produce industrial grade sand suitable for glass manufacture. As stated in the Scoping Request submitted by Sibelco UK to Norfolk County Council in January 2013, 90% of sales are expected to be of sand for glass manufacture. The small balance of sales of finer and coarser sands that are likely to be sold into sports and horticultural markets are produced as a result of the processing of sands for glass making. Therefore the purpose of the Silica Sand Review is to meet the shortfall in allocated sites suitable for the production of glass sand as required by the existing processing facility. In addition, there exist permitted sites for silica sand extraction located in the Mintlyn Beds which are currently mothballed.</p> <p>Therefore, it is intended that preferred areas/areas of search for silica sand extraction defined by Norfolk County Council will only include the Leziate Beds, as mapped by BGS.</p>

**Question 16:** If you are a landowner of over 10 hectares in the silica sand resources and would be **unwilling** for silica sand extraction to take place on your land under all circumstances, please respond to us with details and a plan showing your landholding. This information would be used in defining Preferred Areas/Areas of Search only, and is valid for the purposes of this review only.

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90399	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b>            Received: <b>20/04/2015 via web</b>            It is accepted that the willingness of the landowner could be a key consideration in planning for future supply.</p>	<p>Agreed.</p>
90447	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b>            Received: <b>20/4/2015 via Email</b></p> <p>This question is not applicable to Sibelco.            However, in relation to paragraph 16.1, the second sentence says "If a landowner is willing for silica sand extraction to take place they have an opportunity to put forward land as a potential specific site allocation". Presumably all the evidence required to support such an allocation as detailed in Section 7 would need to be provided by the landowner? On the face of it however, paragraph 16.1 does not indicate that a landowner requires a mineral operator with an interest in developing the site. The delivery potential of a site is a fundamental requirement of the plan process.</p>	<p>Agreed that the evidence required to support a specific site allocation, as detailed in Section 7 would need to be provided by the landowner, if the site was being proposed by a landowner.</p> <p>We agree that paragraph 16.1 does not state that a site proposed by a landowner would be required to also have a mineral operator with an interest in developing the site. We also agree that specific sites that are allocated as part of the plan process must be deliverable.</p> <p>In order for extraction to take place on a site, the landowner must be willing, to enable the site to be accessed and worked. Whilst a mineral operator will be required, at a future point, in order for extraction to take place on an allocated site, it is not considered that this is essential at the site allocation stage. There are a number of sites allocated in the Minerals Site Specific Allocations Plan which were submitted by a landowner without an associated mineral operator. Therefore landowners will not be required to have a mineral operator interested in developing their site in order to submit a site to the Silica Sand Review.</p>

**Question 17:** Is the approach to land to be excluded from Preferred Areas and Areas of Search appropriate, if these areas need to be defined through the Silica Sand Review process, or should an alternative approach be used? Please provide evidence/information to support your view, including alternatives which would comply with national policy and guidance.

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90402	<p>Respondent: <b>Snettisham Parish Council (Mr S Bower) [1320]</b> Received: <b>17/04/2015 via email</b></p> <p>Snettisham Parish Council believes that the extraction of minerals in the vicinity of Snettisham would be inappropriate. The majority of the material in the area appears to be under the Village, which would make extraction not viable.</p> <p>Further, the land around the Village is of a predominantly agricultural nature and we would not wish to see further development affecting that. Given that the economy of the area is heavily dependent on tourism, any industrial scale extraction would have a devastating effect.</p> <p>The land east of the Village is at very low levels, and would be extremely liable to flooding, both from the water table and marine inundation.</p> <p>The Wash area is of incredible value ecologically, and birdlife etc. is vitally important, both in scientific terms and because of the economic benefit which inevitably follow.</p> <p>Consequently we believe that this area is totally unsuitable for such development, and wish to be excluded from any long terms plans on which the County may decide.</p>	<p>The majority of the silica sand resource in Snettisham Parish Council area is not under the village of Snettisham. Silica sand would obviously not be extracted from under existing built development. When defining preferred areas/areas of search for silica sand extraction Norfolk County Council will exclude land within 250 metres of sensitive receptors (such as housing and schools). If a specific site is proposed within 250 metres of a sensitive receptor then evidence on the potential effects of silica sand extraction on amenity will need to be provided by the proposer of the site.</p> <p>The map in Section 11 of the Initial Consultation document shows the areas of Snettisham that are agricultural land grade 3. However, taking into account the consultation responses from NWT, Natural England and Sibelco UK, it is intended that preferred areas/areas of search for silica sand extraction defined by Norfolk County Council would not exclude agricultural land grade 3.</p> <p>The map in Section 12 of the Initial Consultation document recognises the areas of Snettisham that are in flood zones 2 and 3. Silica sand extraction is considered to be 'water compatible' development in the National Planning Practice Guidance and appropriate in all flood zones, subject to a Flood Risk Assessment being carried out which demonstrates that the proposal does not result in</p>

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		<p>an unacceptable flood risk to the site itself and without increasing flood risk elsewhere. The Environment Agency has responded to this consultation to state that land in flood zones 2 and 3 does not need to be removed from consideration for silica sand extraction, although a sequential approach should be taken to site selection.</p> <p>Land in flood zones 2 and 3 will therefore not be excluded from preferred areas or areas of search for silica sand extraction defined by Norfolk County Council.</p> <p>The ecological importance of The Wash is recognised in Section 8.1 of the Initial Consultation document. In defining a preferred area/area of search for silica sand extraction potential adverse impacts to The Wash SPA and Ramsar site and The Wash and North Norfolk Coast SAC will be taken into account.</p> <p>Any specific site proposed within 250 metres of the boundary of The Wash would need to provide enhanced evidence to Norfolk County Council to show that significant effects on the qualifying features will not occur as a result of silica sand extraction. In addition, enhanced evidence will also be required if a site is proposed more than 250 metres from The Wash, but the proposer of the site considers that there is the potential for adverse impacts to The Wash.</p>
90406	Respondent: <b>Norfolk Coast Partnership (Mr T Venes) [518]</b> Received: <b>20/4/2015 via Email</b>	

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	<p>I wish to comment specifically on the document as it relates to, and potentially affects, the Norfolk Coast Area of Outstanding Natural Beauty (AONB), as below:</p> <p>The review document considers a range of statutory designations but omits any reference to the statutory national designation of Area of Outstanding Natural Beauty (AONB). This is a serious omission.</p> <p>Part of the potential silica sand resource is within the Norfolk Coast AONB, designated under the National Parks and Access to the Countryside Act 1949. The purpose of designation is the conservation and enhancement of natural beauty. The County Council has a statutory duty to pursue this purpose, and a statutory duty of regard towards the AONB under section 85 of the Countryside and Rights of Way Act 2000, which involves demonstrating that the designation and its statutory purpose has been properly considered in developing plans and making decisions.</p> <p>The review should therefore recognise the designation and demonstrate how it is taking the statutory purpose of designation into account. This should include recognising the designation in section 8 alongside and in a similar way to the other environmental designations in this section.</p> <p>The AONB should be included in the list in paragraph 17.2 of areas to be excluded from the defined area of search, as extraction would inevitably be a large scale industrial working within the AONB that would clearly not be consistent with the purpose of designation. The approach to potential extraction areas outside but close to the AONB boundary should also be included, as for other designations. A specific distance, as suggested for other designations, would not be appropriate because the potential impact on the setting of the AONB would depend on local topography etc. I suggest that as a precautionary approach, a landscape and visual impact assessment should be undertaken for any potential / proposed sites within 5km of the AONB boundary.</p>	<p>We agree that the Norfolk Coast AONB should have been included as a relevant national designation in the Silica Sand Single Issue Review Initial Consultation document.</p> <p>We agree that the Norfolk Coast AONB should be included in the list in paragraph 17.2 of areas to be excluded from the defined preferred areas/areas of search for silica sand extraction.</p> <p>It is recognised that a specific distance, for enhanced evidence to be provided for sites proposed outside the AONB boundary, is not appropriate because the potential impact on the setting of the AONB would depend on local topography etc.</p> <p>However, we consider that the proposal for a landscape and visual impact assessment to be undertaken for sites proposed within 5km of the AONB boundary is excessive at the site allocations stage. Therefore the approach that will be taken is that all sites proposed will be initially assessed by officers within the County Council's Environment team for potential landscape impacts. Based on this assessment, additional information on landscape impacts will be requested from the proposers of any sites which are considered likely to have an adverse landscape impact on the AONB.</p>



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90400	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b> Received: <b>20/04/2015 via web</b></p> <p>The policy list in paragraph 17.2 is not completely appropriate as it does not specifically include issues of amenity areas or proposed site allocations provided by the Borough Council of King's Lynn and West Norfolk's Site Allocations and Development Management Policies Pre-Submission Document for future growth. In order to fully reflect the intention of Section 10 they should be included in the list.</p> <p>It is important to amend the list so that this joined up approach to the range of land uses needed to support the wider community and local economies can be realised.</p>	<p>The list in paragraph 17.2 includes sensitive receptors for amenity impacts and an area (to be extended to 250 metres) around sensitive receptors. Sensitive receptors will include residential dwellings, educational facilities, workplaces, healthcare facilities and leisure facilities.</p> <p>The list in paragraph 17.2 does not include the proposed site allocations in the Borough Council of King's Lynn and West Norfolk's Site Allocations and Development Management Policies Pre-Submission document. The intention is that these sites will be excluded from Preferred Areas/Areas of Search for silica sand extraction once the document is adopted, as stated in paragraph 10.4.</p>
90412	<p>Respondent: <b>Norfolk Wildlife Trust (Mr John Hiskett) [508]</b> Received: <b>20/4/2015 via Email</b></p> <p>We support the proposal that if it is necessary to designate Areas of Search and that these exclude the areas in the vicinity of Roydon Common and Dersingham Bog and in the vicinity of SSSIs. For water dependent sites this should relate to hydrological catchment of the site, as set out in our responses to questions 2 and 4.</p>	<p>Support noted. Land within the hydrological catchments of Roydon Common and Dersingham Bog will be excluded from Preferred Areas/Areas of Search for silica sand extraction.</p> <p>Land in the vicinity of SSSIs, to be excluded from preferred areas/areas of search, will be based on the potential for mineral extraction to have adverse impacts on the qualifying features of the SSSI. Different distances will be applied to sites with geological qualifying features compared with species or habitat features.</p>
90429	<p>Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b> Received: <b>20/4/2015 via Email</b></p> <p>In line with our response to Question 2 above, we consider the water catchments around Roydon Common and Dersingham Bog SAC should be excluded in any Area of Search, and only included in a Preferred Area if accompanied by sufficient evidence to demonstrate that there will be no adverse impacts on the international sites.</p>	<p>As requested, if Norfolk County Council defines preferred areas/areas of search for silica sand extraction, land within the water catchments of Roydon Common and Dersingham Bog SAC will be excluded.</p> <p>If a specific site or preferred area for silica sand extraction is proposed by a mineral operator or</p>

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		landowner within the water catchments around Roydon Common and Dersingham Bog SAC, the proposer will need to provide sufficient evidence to demonstrate that there will be no adverse impact on the international sites.
90448	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b>  Received: <b>20/4/2015 via Email</b></p> <p>No - in this response Sibelco highlights areas of concern in relation to potentially excluding previous mineral working (may not be fully worked out); excluding land with supposed agricultural land grades 1, 2 and 3 (undifferentiated); excluding flood zones 2 and 3; including areas of silica sand potential only from within the Leziate Beds. All of these unnecessarily restrict options and opportunities for future silica sand supply to meet a proven need, while the Council is required to meet the shortfall in the Plan period in accordance with National Planning Guidance. This is evident from the maps on pages 51, 52, 53 and 54 which show an almost blanket exclusion on the Leziate sand resource area when possible constraints are applied. In addition, the maps take no account of other geological horizons of potential interest to a silica sand review nor to potential quarry development of geological sub-crops beneath other deposits.</p>	<p>As Sibelco UK have stated that there are previous mineral workings that are not exhausted of silica sand a map has subsequently been requested and provided by Sibelco UK to show where the specific areas that are referred to in their response are located. This will enable the maps to be updated as appropriate, if Sibelco considers that these areas should not be excluded from a preferred area or area of search for future silica sand extraction.</p> <p>Taking into account the consultation responses, it is now intended that only grade 1 and 2 agricultural land is excluded from preferred areas/areas of search for silica sand extraction. These agricultural land grades affect a significantly smaller area of the silica sand resource.</p> <p>As the Environment Agency have responded that land in flood zones 2 and 3 do not need to be removed from consideration for silica sand extraction, land in flood zones 2 and 3 will not be removed from consideration as potential preferred areas or areas of search for future silica sand extraction.</p> <p>The maps in the Initial Consultation document are based on the Mineral Safeguarding Area for silica sand which includes the Leziate Beds and Mintlyn Beds as mapped by BGS. It is not considered</p>

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		<p>appropriate for the preferred areas/areas of search to include other geological horizons or geological sub-crops beneath other deposits because these areas are less certain to come forward for silica sand extraction based on the locations of previous extraction sites. The preferred areas/areas of search are currently planned to only include the Leziate Beds, which contain silica sand suitable for glass sand because this is the type of silica sand needed for the existing processing plant.</p> <p>It should be noted that Norfolk County Council are willing to consider proposals for Specific Sites for silica sand extraction from outside the silica sand (Mintlyn and Leziate Beds) and carstone surface deposits, as mapped by the BGS, if suitable evidence is provided regarding the quality and grade of silica sand on the site.</p>

**Question 18:** Are there any other issues that should be taken into account in the assessment of proposals for specific sites and in the definition of Preferred Areas and/or Areas or Search for silica sand extraction? Please provide evidence/information to support your response.

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90354	<p>Respondent: <b>Worcestershire County Council (Mr N Dean) [16204]</b> Received: <b>05/03/2015 via email</b></p> <p>Worcestershire produces Silica Sand (a locally specific naturally bonded moulding sand) for the foundry industry. Demand for this material has withered and 2012`s sales were 2,000t pa. (ONS PA 1007, 2012). No new sites for the production of silica sand were submitted to a recent "Call for sites" for the emerging Minerals Local Plan for Worcestershire. Permitted reserves of silica sand in Worcestershire are confidential but are more than sufficient for the county`s needs over the proposed life of the emerging Plan and well beyond it. Worcestershire County Council does not therefore seek to rely on Norfolk`s supply of this material, or equally, to meet Norfolk`s need for this material. I have no objection to, or matters of concern about, Norfolk CC`s proposed approach.</p>	Noted
90365	<p>Respondent: <b>Anglian Water (Sue Bull) [7891]</b> Received: <b>31/03/2015 via email</b></p> <p>It is preferred that any additional sites allocated for silica sand extraction do not have any Anglian Water assets within the boundary however where this cannot be avoided Anglian Water's existing water mains/ sewer pipes within the boundary of a proposed site are protected by the provision of schedule 14 of the WIA 1991. The land owner's attention should be brought to this.</p>	Noted.
90366	<p>Respondent: <b>Equality and Human Rights Commission (Mr M Piscapore-Caruana) [16416]</b> Received: <b>31/03/2015 via email</b></p> <p>The Commission does not have the resources to respond to all consultations, but will respond to consultations where it considers they raise issues of strategic</p>	Noted. An Equality Impact Assessment will be carried out on the draft policies in the Silica Sand Single Issue Review of the Minerals Site Specific Allocations Plan at an appropriate stage in the process.

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	<p>importance.</p> <p>Local and other public authorities have obligations under the Public Sector Equality Duty (PSED) in the Equality Act 2010 to consider the effect of their policies and decisions on people sharing particular protected characteristics. We provide advice for public authorities on how to apply the PSED, which is an on-going legal obligation and must be complied with as part of the planning process. Thus, the PSED is the mechanism through which public authorities involved in the planning process should consider the potential for planning proposals to have an impact on equality for different groups of people. To assist, you will find our technical guidance at: <a href="http://www.equalityhumanrights.com">www.equalityhumanrights.com</a>, using the search term: 'Technical Guidance on the Public Sector Equality Duty'.</p>	
90370	<p>Respondent: <b>Marine Management Organisation (Angela Gemmill) [16419]</b> Received: <b>09/04/2015 via email</b></p> <p>Thank you for inviting the Marine Management Organisation (MMO) to comment on the above consultation.</p> <p>As the marine planning authority for England the MMO is responsible for preparing marine plans for English inshore and offshore waters. At its landward extent, a marine plan will apply up to the mean high water springs mark, which includes the tidal extent of any rivers. As marine plan boundaries extend up to the level of the mean high water spring tides mark there will be an overlap with terrestrial plans which generally extend to the mean low water springs mark. In our duty to take all reasonable steps to ensure compatibility with existing development plans, which apply down to the low water mark, we are seeking to identify the 'marine relevance' of applicable plan policies.</p> <p>On 2 April 2014 the East Inshore and East Offshore marine plans were published, becoming a material consideration for the Marine Management Organisation (MMO) and other public authorities with decision making functions. The East Inshore and East Offshore Marine Plans provide guidance for sustainable development in English waters, and cover the coast and seas from Flamborough Head to Felixstowe. Marine plans will inform and guide decision makers on development in marine and coastal areas. More information including the East Inshore and East Offshore marine plans document can be found at</p>	<p>Noted. The East Inshore and East Offshore Marine Plans document is referred to in the Sustainability Appraisal Scoping Report and will be taken into account in the Silica Sand Review where applicable.</p>

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	<p><a href="https://www.gov.uk/government/collections/marine-planning-in-england">https://www.gov.uk/government/collections/marine-planning-in-england</a> Please note that if you are an authority developing a plan, you may find the Planning Advisory Service Soundness Checklist useful (<a href="http://www.pas.gov.uk/web/pas1/local-planning/-/journal_content/56/332612/15045/">http://www.pas.gov.uk/web/pas1/local-planning/-/journal_content/56/332612/15045/</a>). Pages 24-31 provide information on the integration of marine and terrestrial planning. You may also wish to refer to the MMO's guide for Local Authority planners that explains what local council planners need to know about marine planning (<a href="https://www.gov.uk/government/publications/marine-planning-a-guide-for-local-authority-planners">https://www.gov.uk/government/publications/marine-planning-a-guide-for-local-authority-planners</a>).</p> <p>If you have any questions or need any further information please just let me know. More information on the role of the MMO can be found on our website <a href="http://www.gov.uk/mmo">www.gov.uk/mmo</a></p>	
90363	<p>Respondent: <b>Mr M I Archer [1901]</b> Received: <b>17/03/2015 via letter</b></p> <p>Silica sand extraction near Roydon, Castle Rising and Grimston Part of the Leziat beds lies very close to an AONB and borders Roydon Common a SAC, SSSI and Ramsar site. Mineral extraction near to Roydon Common could cause severe damage to the ecology of this very rare and precious wetland habitat as well having a very detrimental effect on the visual appearance of the landscape. The village of Roydon would suffer from the noise, dust and visual effects of mineral extraction in such close proximity to a residential area.</p>	<p>We can confirm that the impact of silica sand extraction on the AONB, and Roydon Common and Dersingham Bog SAC will be taken into account in determining suitable areas for silica sand extraction.</p> <p>The potential amenity impact of silica sand extraction, include visual impacts, will also be taken into account in determining suitable areas for silica sand extraction. Sites allocated through the Silica Sand Review process will also need to apply for, and be granted planning permission prior to any extraction taking place. The Silica Sand Review process and the planning application process will ensure that silica sand extraction would only take place where there would not be adverse amenity impacts on local residents. Sites will be assessed against Core Strategy policies CS14 and DM12 regarding amenity.</p>
90364	<p>Respondent: <b>Mr M I Archer [1901]</b> Received: <b>17/03/2015 via letter</b></p>	<p>Historic England and Norfolk County Council's Historic Environment Service will be consulted</p>

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	<p>Silica sand extraction near Bawsey, Grimston and Leziate</p> <p>The archaeological brick and tile collection in Norwich Castle Museum of Archaeology is a comprehensive collection of tiles from the Romano-British, medieval periods. Glazed floor tiles made at Bawsey tile kiln form a large part of the medieval component of the collection. Mineral workings in this area could destroy the archaeological remains of the original workings forever. The villages of Bawsey, Leziate and Pott Row would suffer from the noise, dust and visual effects of mineral extraction in such close proximity to residential areas.</p>	<p>as part of the Silica Sand Review to ensure that potential impacts on archaeology are taken into account in the assessment of sites and areas for future silica sand extraction.</p> <p>The potential amenity impact of silica sand extraction, include visual impacts, will also be taken into account in determining suitable areas for silica sand extraction. Sites allocated through the Silica Sand Review process will also need to apply for, and be granted planning permission prior to any extraction taking place. The Silica Sand Review process and the planning application process will ensure that silica sand extraction would only take place where there would not be adverse amenity impacts on local residents. Sites will be assessed against Core Strategy policies CS14 and DM12 regarding amenity.</p>
90381	<p>Respondent: <b>Leziate Parish Council (Ms E Oliver) [11614]</b> Received: <b>17/04/2015 via email</b></p> <p>Leziate Parish Council have considered the questions in the Initial Consultation document but feel unable to comment on the technical nature of these questions. However it is important even at this early stage that it is made clear that Leziate Parish has suffered at the hands of the silica sand industry for many years. We ask that we are kept informed at every stage of this process, obviously at the site specific stage we will have a useful contribution to make.</p>	<p>Noted. The cumulative impacts of mineral extraction will be assessed as part of the Silica Sand Review process. Leziate Parish Council will be consulted at each stage of the Silica Sand Review process.</p>
90382	<p>Respondent: <b>Grimston Parish Council (Mr J Missing) [9551]</b> Received: <b>17/04/2015 via email</b></p> <p>I have to report that my Council is disappointed that we appear to be going over the same issues yet again. Grimston Parish Council has twice now made it very clear the dangers of considering any of the three sites surrounding our village for sand</p>	<p>Noted. It is unfortunate that Norfolk County Council was unable to allocate sufficient sites for silica sand extraction in the Minerals Site Specific Allocations plan, for the reasons summarised in paragraph 5.4 of the Initial Consultation document. This shortfall in</p>

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	<p>extraction in 2008 &amp; 2012.</p> <p>We have highlighted the devastating impact it will have on our valley in all aspects; one of the best landscapes in Norfolk; one of Norfolk's most important ecological valleys for flora, fauna and important habitats; the threat to the geology and hydrology of our valley and its surrounding hills and lastly but most importantly Roydon Common SAC &amp; Ramsar. Please refer to my letters of 19/03/2008 &amp; 22/06/2012. The Parish Council continue to object to all three sites already considered and rejected, even before we are asked!</p>	<p>allocated sites is the reason why Norfolk County Council is consulting on the method for defining suitable locations for silica sand extraction through the current review process. We can confirm that the impact of silica sand extraction on the AONB, and Roydon Common and Dersingham Bog SAC will be taken into account in determining suitable areas for silica sand extraction. The impact of silica sand extraction on the landscape and ecology outside of these designated areas will also be taken into account.</p>
90478	<p>Respondent: <b>Middleton parish council (Mrs Kate Senter) [1646]</b> Received: <b>20/5/2015 via Email</b></p> <p>Middleton Parish Council noted that there is no proposal to dig for Silica sand within our Parish although recognised that continued quarrying in Leziate and Ashwicken will mean the continuance of lorries using our village as a haulage route, albeit that more sand is being moved via train now.</p> <p>Therefore, Middleton Parish Council has no objections to the proposals.</p>	<p>Silica sand resources underlie the area covered by Middleton Parish Council. This Initial Consultation is the first stage in the Silica Sand Review process and at this early stage no specific sites have been proposed. There is the possibility that a landowner or mineral operator could propose a Specific Site for silica sand extraction to be located within the parish of Middleton as part of the Silica Sand Review process.</p> <p>We are also likely to need to define Preferred Areas or Areas of Search for silica sand extraction, as part of the Silica Sand Review. The starting point for defining Preferred Areas or Areas of Search is to consider all land within the silica sand resource and then potentially exclude areas of land with constraints, such as environmental designations and sensitive receptors. The suggested method for designating Preferred Areas or Areas of Search is discussed in Section 17 of the Initial Consultation document. As there are silica</p>



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		sand resources underlying the parish of Middleton, this land would be considered as part of the process of designating Preferred Areas of Areas of Search for future silica sand extraction, unless it is excluded due to constraints.
90407	<p>Respondent: <b>Norfolk Coast Partnership (Mr T Venes) [518]</b> Received: <b>20/4/2015 via Email</b></p> <p>I wish to comment specifically on the document as it relates to, and potentially affects, the Norfolk Coast Area of Outstanding Natural Beauty (AONB), as below:</p> <p>The review document considers a range of statutory designations but omits any reference to the statutory national designation of Area of Outstanding Natural Beauty (AONB). This is a serious omission.</p> <p>Part of the potential silica sand resource is within the Norfolk Coast AONB, designated under the National Parks and Access to the Countryside Act 1949. The purpose of designation is the conservation and enhancement of natural beauty. The County Council has a statutory duty to pursue this purpose, and a statutory duty of regard towards the AONB under section 85 of the Countryside and Rights of Way Act 2000, which involves demonstrating that the designation and its statutory purpose has been properly considered in developing plans and making decisions.</p> <p>The review should therefore recognise the designation and demonstrate how it is taking the statutory purpose of designation into account. This should include recognising the designation in section 8 alongside and in a similar way to the other environmental designations in this section.</p> <p>The AONB should be included in the list in paragraph 17.2 of areas to be excluded from the defined area of search, as extraction would inevitably be a large scale industrial working within the AONB that would clearly not be consistent with the purpose of designation. The approach to potential extraction areas outside but close to the AONB boundary should also be included, as for other designations. A</p>	<p>We agree that the Norfolk Coast AONB should have been included as a relevant national designation in the Silica Sand Single Issue Review Initial Consultation document.</p> <p>We agree that the Norfolk Coast AONB should be included in the list in paragraph 17.2 of areas to be excluded from the defined preferred areas/areas of search for silica sand extraction.</p> <p>It is recognised that a specific distance, for enhanced evidence to be provided for sites proposed outside the AONB boundary, is not appropriate because the potential impact on the setting of the AONB would depend on local topography etc.</p> <p>However, we consider that the proposal for a landscape and visual impact assessment to be undertaken for sites proposed within 5km of the AONB boundary is excessive at the site allocations stage. Therefore the approach that will be taken is that all sites proposed will be initially assessed by officers within the County Council's Environment team for potential landscape impacts. Based on this assessment, additional information on landscape impacts</p>

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	specific distance, as suggested for other designations, would not be appropriate because the potential impact on the setting of the AONB would depend on local topography etc. I suggest that as a precautionary approach, a landscape and visual impact assessment should be undertaken for any potential / proposed sites within 5km of the AONB boundary.	will be requested from the proposers of any sites which are considered likely to have an adverse landscape impact on the AONB.
90401	Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b> Received: <b>20/04/2015 via web</b> None	Noted
90430	Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b> Received: <b>20/4/2015 via Email</b> Natural England is not aware of any.	Noted
90449	Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b> Received: <b>20/4/2015 via Email</b>  Sibelco disagrees with the content of paragraph 6.2. Horticultural, sports and equestrian sands are not lower grade silica sands. Sands utilised for these end uses are high quality silica sands which have the correct physical and chemical properties for the specific end-use. These grades are often produced as co-products during the beneficiation of glass sand and other grades and require different and often separate grain size distributions. In relation to paragraph 6.8, Sibelco would advocate that silica sand used for glass manufacture requires specialist processing. In relation to paragraph 6.9, the distance over which mineral could be transported to the existing processing plant would depend on transportation method(s), the nature of the required beneficiation and annual volume. In relation to paragraph 6.10, based on assessment work and considering the level of potential exclusion applied to the Leziat Bed outcrop as depicted on the maps on pages 51 to 54 of the consultation document, Sibelco has no information which would lead the Company to the view that areas do not contain silica sand suitable for processing at the Leziat plant. In relation to paragraph 6.12, it is noted that sales from the Leziat site is used in clear container glass and float glass. Clear container manufacture uses very little cullet and virtually no external cullet is used in float glass manufacture.	6.2 Noted – this statement will be amended if it is included in subsequent stages of the Silica Sand Review process.  6.8 Noted  6.9 Noted  6.10 Noted – however, Sibelco has stated in relation to proposed site allocations for housing in the Borough Council of King's Lynn and West Norfolk that sites at Knight's Hill and part of the site at West Winch contain silica sand which is not of commercial interest to Sibelco.  6.12 Noted

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90450	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b> Received: <b>20/4/2015 via Email</b></p> <p>Paragraph 7.2 - While Sibelco acknowledges the requirement for a landowner to provide support for the inclusion of land in the Silica Sand Review (and for an allocation to be made), to require evidence of any type of agreement is inappropriate and unlikely to be deliverable. At an early stage in a site assessment (and early in the Mineral Plan process) there is unlikely to be formal agreements in place between landowner and promoter /mineral operator. This would be a wholly unreasonable requirement to place upon land for a potential mineral site allocation.</p> <p>In relation to paragraph 7.3, Sibelco would be agreeable in principle to the provision of borehole data and a statement of the quality, quantity and extent of the sand resource. However due to commercial considerations this will need to be on a confidential basis to the Mineral Planning Authority.</p> <p>Sibelco requests more information on what the Mineral Planning Authority expects to be delivered under the heading of a "Planning Statement" (paragraph 7.4). The proper time for the provision of a planning statement is at the point of submission of an application and Sibelco is of the view that it is inappropriate to seek such a statement during the plan making process. It may be possible for the site promoter to undertake a basic planning assessment at this stage. Further clarification and guidance is required on this matter.</p>	<p>7.2 Deliverability is a key part of the allocations process and deliverability can only take place if a landowner is willing. The removal of landowner willingness and the withdrawal of MIN 39 immediately prior to the previous site allocations examination meant that this site could not be considered for allocation. Sibelco told the Inspector at the examination when asked, whether the landowner was party to any extraction agreement to which they could be tied, that it was only an exploration agreement and there was no compunction to allow extraction. The non-allocation of this site was a significant factor in the Inspector's decision to require a Single Issue Review, a process which is likely to cost in the region of £50,000. Therefore, the County Council considers it prudent to require evidence to minimise the risk of a site being withdrawn. A site can be proposed without a formal agreement in place, however this will need to be considered when assessing deliverability.</p> <p>7.3 Norfolk County Council confirms that borehole data and a statement of the quality, quantity and extent of the sand resource, supplied as part of the Silica Sand Review process, would be treated as commercially confidential.</p> <p>7.4 We recognise that much greater detail would be required as part of a planning statement at the planning application stage,</p>

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		<p>than we would request at the site allocation stage. Therefore, the reference to 'planning statement', in relation to the site allocations process, will be amended to 'planning assessment' to avoid confusion with the planning application process. As part of the 'call for sites' process the information that is initially requested from the proposers of specific sites is in the form of responses to a number of questions contained in the 'site proposal form' and the submission of additional information where applicable. The aim of this process is for the site proposer to explain how silica sand can be extracted from the proposed site without causing unacceptable adverse environmental, heritage, amenity and transport impacts.</p>
90451	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b>  Received: <b>20/4/2015 via Email</b></p> <p>Paragraph 10.2 (Air Quality and Dust) - Sibelco concurs with the view of the Health and Safety Executive that " .... the working of silica sand does not present a health risk to the general public".</p>	Noted
90462	<p>Respondent: <b>Environment Agency (Ms Louisa Johnson) [16424]</b>  Received: <b>23/4/2015 via Email</b></p> <p>General Comments on Site Selection  The Minerals Site specific Allocations Plan - Single Issue Silica Sand Review shows the proposed mineral extraction areas by Silica Sand to be situated along the Northwest Norfolk Sandringham Sands. This is a Drinking water Protected Area (DwPA) under the EU Water Framework Directive and will therefore need to be protected.</p> <p>With respect to the protection of the environment from areas of extraction in</p>	<p>Noted. It is considered highly unlikely that a silica sand extraction site would be restored through becoming a non-hazardous landfill site. It is also considered unlikely that a silica sand extraction site would be restored through becoming an inert landfill. However, if either of these scenarios are proposed by the mineral extraction company, the Environment Agency's consultation comments will be taken into account in assessing their proposal.</p>

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	<p>environmentally sensitive locations, it is important that restoration schemes, following completion of mineral extraction works, comply with landfill directive requirements. Therefore, if the restoration plans involve importation of material for restoration, independent of whether it is considered inert or non-hazardous, requirements are that they are protective of the underlying aquifers, which may require a Landfill Directive compliant artificial geological barrier or liner depending on the waste type. The surface water management plan following restoration should not compromise capping works and should incorporate pollution prevention control measures.</p> <p>Any filling operation will also need to have an appropriate level of permit. This should be considered at planning stage, and built into any restoration scheme. We therefore encourage parallel tracking in order to manage risks to groundwater and obtain a permit. The sands and gravels present along the potential mineral extraction areas overlying the sand aquifer unit are considered as secondary aquifers and are considered as part of the WFD DwPAs. These aquifers are, also, considered to be environmentally sensitive.</p> <p>Our aim is to protect existing water supplies and the approach we follow is to steer the development of waste operations which may have the potential to pollute groundwater into less sensitive locations. The locations of private domestic sources may be held by the Local District Council on the register required by the Private Water Supplies Regulations 1991.</p> <p>We also encourage robust infrastructure which will seal off any pollution should it occur and avoid expensive clean up operations and deterioration of groundwater quality. Long term management and maintenance of protective measures should be provisioned and incorporated in the design to ensure protection of the water environment is not compromised. Open water restoration should also consider pollution risks in source protection zones. Please refer to our guidance 'Groundwater protection: Principles and Practice' (GP3), in particular position statement E1, relating to landfill location, which will also apply to any filling operation.</p>	<p>Norfolk County Council's adopted Minerals and Waste Core Strategy includes Policy DM3 on groundwater and surface water which required applicants to give due regard to the Environment Agency's groundwater protection document GP3, demonstrate that proposed developments would not adversely impact upon groundwater quality or resources and submit a hydrological/hydrogeological risk assessment where applicable to demonstrate this.</p>

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	<p>We encourage baseline conditions to be established prior to operations commencing to ensure that during the lifetime of mineral extraction and waste operations and following restoration environmental limits are not breached and groundwater quality has not been compromised. This will also aid the surrender process as it can be used as supportive information to demonstrate the protection of the water environment throughout operations.</p> <p>Furthermore, we would require a Hydrogeological Risk Assessment and a Landfill Gas Risk Assessment to be submitted for proposed landfill sites  <a href="http://www.environment-agency.gov.uk/business/sectors/32445.aspx">http://www.environment-agency.gov.uk/business/sectors/32445.aspx</a>.</p> <p>In accordance with the Landfill Directive the following criteria should be met:</p> <ul style="list-style-type: none"> <li>* Waste acceptance, to allow the classification of waste and their control and limits.</li> <li>* Groundwater Protection, to prevent direct discharge of hazardous substances in the groundwater and prevent pollution of groundwater from non-hazardous substances.</li> <li>* Gas management, to ensure adequate mitigation measures are in place for potential gas migration.</li> <li>* Quality Assurance, to ensure all engineering elements are constructed to high quality standards.</li> <li>* Integration of pollution control measures, to ensure contamination is appropriately managed, contained and sealed off from entering the groundwater and incorporate their long-term management and maintenance in the design.</li> <li>* Hydrogeological Risk Assessment, to include an assessment of the depth of mineral to be extracted ( and more specifically the depth of mineral below the water table) and an assessment of the impact of de-watering on local groundwater levels and receptors (e.g. water features-rivers, springs, wetlands) and other protected rights (i.e. licensed and unlicensed groundwater and surface Water abstractions).</li> <li>* Stability, to ensure adequate measures are in place which will not comprise engineering elements. A geotechnical study should be undertaken, where necessary, and include the submission of a Stability Risk Assessment report along with the Hydrogeological Risk Assessment.</li> </ul>	

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90468	<p>Respondent: <b>Highways England (Mr Roger Chenery) [16426]</b> Received: <b>27/4/2015 via Email</b></p> <p>Highways England continue to manage and operate the Strategic Road Network in England. Having viewed the consultation document I can find no specific question which relates directly to Highways England areas of responsibility. However, whilst air quality, dust and noise have specific policies there appears to be no consideration of transportation routes for road based haulage.</p> <p>It is unlikely that road haulage of aggregates is likely to be produced in such numbers that congestion would occur. However, I would expect that consideration of the quality and character of road junctions at access points onto the Strategic Road Network should be considered if there is expected to be intensification of their use.</p>	<p>The detail on air quality, dust and noise contained within the Initial Consultation document is quoted from the adopted Minerals Site Specific Allocations Plan and refers to policies in Norfolk County Council's adopted Minerals and Waste Core Strategy.</p> <p>The Minerals and Waste Core Strategy also contains two policies on transport – CS15 and DM10. These adopted policies refer to the need for HGV movements from mineral development to not generate unacceptable impacts on the capacity and/or efficiency of the highway network, including the trunk road network.</p> <p>The silica sand extracted in Norfolk is transported to the processing plant at Leziate. The majority of processed silica sand is then exported out of Norfolk by rail, to glass manufacturers in the north of England. The impact of road transportation of silica sand on road junctions at access points onto the Strategic Road Network will be assessed as part of the Silica Sand Review where applicable. This will relate to the transportation of silica sand from the extraction site to the processing plant at Leziate.</p>
90471	<p>Respondent: <b>Historic England (Ms Kayleigh Wood) [15387]</b> Received: <b>28/4/2015 via Email</b></p> <p>Please note that Historic England have produced guidance entitled 'Mineral Extraction and the Historic Environment'. Where we have made comment, below, further guidance on how to address these issues can be found in this document. See the link below: <a href="https://www.historicengland.org.uk/images-books/publications/mineral-extraction-">https://www.historicengland.org.uk/images-books/publications/mineral-extraction-</a></p>	Noted.

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	<p>and-historic-environment/.</p> <p>With regard to the basis for the site assessments at page 9 and 10 it is surprising to see that the 'Historic Environment' does not form a topic in itself, under which Archaeology could fall. At the 'heritage assets' bullet on page 10 it is considered that non-designated heritage assets and unknown archaeological site should also be a consideration of the Silica Sand Review.</p> <p>We support the inclusion of heritage within the proposed Planning Statement at point 7.4 on page 20 and would recommend bracketed '(designated and non-designated)' after 'heritage assets' at point 7.5.</p>	<p>We agree that the heading on page 10 of the Initial Consultation document should be Historic Environment, instead of archaeology and that archaeology would then form one part of the assessment of the historic environment.</p> <p>We agree that non-designated and unknown archaeological sites will also be a consideration of the Silica Sand Review.</p> <p>Point 7.5 will be amended as requested.</p>



## Sustainability Appraisal - Scoping Report

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90367	<p>Respondent: <b>Norwich City Council (Mr J Bunting) [16413]</b>            Received: <b>20/03/2015 via email</b></p> <p>No comment</p>	No comment
90372	<p><b>4. Task A1: Relationship with International, European, National and Local Plans, Policies and Strategies</b></p> <p>Respondent: <b>Broads Authority (Natalie Beal) [16282]</b>            Received: <b>14/4/2015 via Email</b></p> <p>Literature Review</p> <ul style="list-style-type: none"> <li>* The Broads Plan 2011 should be reviewed: <a href="http://www.broads-authority.gov.uk/__data/assets/pdf_file/0015/402045/Broads-Plan-2011.pdf">http://www.broads-authority.gov.uk/__data/assets/pdf_file/0015/402045/Broads-Plan-2011.pdf</a></li> <li>* The Broadland Rivers Catchment Plan could be relevant: <a href="http://www.broads-authority.gov.uk/__data/assets/pdf_file/0004/457177/Catchment-Plan-website-final.pdf">http://www.broads-authority.gov.uk/__data/assets/pdf_file/0004/457177/Catchment-Plan-website-final.pdf</a></li> <li>* The Landscape Character Assessment: <a href="http://www.broads-authority.gov.uk/news-and-publications/publications-and-reports/planning-publications-and-reports/landscape-character-assessments">http://www.broads-authority.gov.uk/news-and-publications/publications-and-reports/planning-publications-and-reports/landscape-character-assessments</a></li> <li>* The Landscape Sensitivity Study: <a href="http://www.broads-authority.gov.uk/news-and-publications/publications-and-reports/planning-publications-and-reports/landscape-sensitivity-studies">http://www.broads-authority.gov.uk/news-and-publications/publications-and-reports/planning-publications-and-reports/landscape-sensitivity-studies</a></li> <li>* The recent consultations from Historic England/English Heritage</li> <li>* The attached report that addresses Archaeology in the Broads</li> </ul>	The review of plans, policies and strategies will be amended to include the documents detailed in this consultation response.
90373	<p><b>4. Task A1: Key messages in the review of policies, plans and programmes</b></p> <p>Respondent: <b>Broads Authority (Natalie Beal) [16282]</b>            Received: <b>14/4/2015 via Email</b></p> <p>Page 46: The situation with regards to Fracking and the Broads is currently unclear. There was an announcement that suggests fracking under the Broads is not sensible. Secondary legislation will define 'other protected areas'. Perhaps this</p>	The national planning policy position on The Broads and fracking is included in the table of key messages from plans, policies and programmes on page 46. If the national policy approach or legislation changes then the Sustainability Appraisal will be updated.

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	can be clarified in this section?	
90374	<p><b>5.1 Task A2: Introduction and Sustainability Baseline Summary</b></p> <p>Respondent: <b>Broads Authority (Natalie Beal) [16282]</b> Received: <b>14/4/2015 via Email</b></p> <p>SA Indicators Whilst we acknowledge that meaningful indicators are difficult to find for SA objectives, perhaps the following suggestions could help with these SA issues that are of particular relevance to the Broads. We feel these examples are measureable and specifically relevant:</p> <ul style="list-style-type: none"> <li>* Page 63. It is not clear how the four indicators are relevant to SA5. We appreciate that these are some of the only indicators we have. Perhaps more relevant could be how many archaeological finds there are as a result of the works related to minerals and waste. Additionally, an indicator along the lines of assessing the impact on heritage assets - i.e. appraisals completed and findings acted upon. Perhaps permissions approved contrary to heritage expert advice. Restoration schemes that consider or enhance a heritage asset. If archaeology is found, then interpretation as part of a restoration scheme.</li> <li>* Page 63. SA6. Perhaps schemes approved contrary to biodiversity or geodiversity expert advice. Also restoration schemes that benefit wildlife or aid interpretation of geodiversity.</li> <li>* Page 64. SA8 Indicator - potential to refer to restoration schemes? Also, unsure of the relevance of woodland cover. It seems to be more about works near to or in protected landscapes and how these have been assessed and perhaps if permission is approved contrary to landscape expert advice.</li> <li>* Page 65. Permission contrary to EA advice on water quality grounds.</li> <li>* Page 68. Permission contrary to EA advice on flood risk grounds.</li> </ul> <p>How does the SA Scoping Report address the issue of Peat? Peat is important in terms of Carbon sequestration, biodiversity and archaeology.</p>	<p>Page 63 – SA5. The existing indicators provide the context for objective SA5. We will investigate whether additional indicators can be recorded using the Historic Environment Record.</p> <p>We do not consider that it is appropriate or practicable to include any of the indicators suggested on archaeology because finds are of variable significance and therefore not appropriate to record quantitatively. In addition, a lack of archaeology on site would not be a negative outcome for the site.</p> <p>We consider that it is not necessary to add the suggested indicators regarding heritage assets. These issues would be considered in the consultation response from statutory consultees on the historic environment and inform whether or not they object to the proposed development.</p> <p>An additional indicator will be added as suggested, to monitor the number of planning permissions granted contrary to historic environment objections from statutory consultees.</p> <p>Page 63 – SA6. Additional indicators will be added as suggested, to monitor a. the number of planning permissions granted contrary to biodiversity or geodiversity objections from statutory consultees and b. the number of planning permissions granted with restoration schemes providing biodiversity or geodiversity benefits.</p>

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		<p>Page 64 - SA8. Additional indicators will be added as suggested, to monitor:</p> <ul style="list-style-type: none"> <li>a. number of planning permissions granted within or adjacent to the AONB,</li> <li>b. number of planning permissions granted within or adjacent to the Heritage Coast Area,</li> <li>c. number of planning permissions granted within or adjacent to the Broads Authority Executive Area,</li> <li>d. number of planning permissions granted within or adjacent to Conservation Areas</li> <li>e. the number of planning permissions granted contrary to landscape objections from statutory consultees.</li> </ul> <p>Page 65 – As suggested, the following indicator will be added on water quality – “Permissions granted contrary to Environment Agency advice on water quality grounds.”</p> <p>Page 68 – SA12 - This indicator will be amended to monitor the number of planning permissions granted contrary to the advice of the Environment Agency or Norfolk County Council as Lead Local Flood Authority.</p> <p>Peat has not been discussed in the Sustainability Appraisal Scoping Report because the National Planning Policy Framework states that planning permission should not be granted</p>

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90375	<p data-bbox="315 264 1137 300"><b>5.2 Task A2: Description of Current Sustainability Baseline</b></p> <p data-bbox="315 336 1037 403">Respondent: <b>Broads Authority (Natalie Beal) [16282]</b> Received: <b>14/4/2015 via Email</b></p> <p data-bbox="315 443 1375 507">Page 70 refers to the importance of Carbon Dioxide but on page 62 only methane is assessed in detail.</p> <p data-bbox="315 547 1361 611">One of the SA Objectives refers to Access being an issue. Notwithstanding the query above re that objective, there is an Index of Deprivation relating to access.</p> <p data-bbox="315 651 1352 715">Page 72. <a href="https://www.nomisweb.co.uk/">https://www.nomisweb.co.uk/</a> is a useful website and gives recent Job Seekers Allowance claimants.</p> <p data-bbox="315 754 1339 850">Page 73. 5.2.4. The Drainage Mills in the Broads are important. Also the entire area of the Broads is an area of Exceptional Waterlogged Archaeology as identified by Historic England.</p> <p data-bbox="315 890 1366 1018">Table 8 - is it the case that the note re the Broads Authority is applicable to each row in that table? Does this need to be said as the data in the table is Norfolk-wide? Also, suggest you write the month and year as conservation areas change throughout a year.</p>	<p data-bbox="1406 233 2016 264">for peat extraction from new or extended sites.</p> <p data-bbox="1406 304 2038 539">Page 70 and 62 – climate change. The SA will be amended to include additional information on carbon dioxide emissions, using the most recently available ‘DECC Local Authority carbon dioxide emissions estimates: 2005-2012’ and the DECC ‘UK greenhouse gas emissions national statistics 1990-2013’.</p> <p data-bbox="1406 579 2042 810">Section 5.2.3 on population. There is not currently a suitable Index of Deprivation (IoD) relating to access. The IoD Barriers to Housing and Services Domain considers accessibility to housing and road distance to GPs, supermarkets, primary schools and Post Offices, rather than social accessibility.</p> <p data-bbox="1406 850 2038 1385">Page 72 – Section 5.2.3 on population. The suggested data source is noted, however, we will continue to use the Index of Multiple Deprivation (IMD) for employment. We will not be including information on Job Seekers Allowance (JSA) claimants only. This is because. Job Seekers Allowance only shows a limited picture of employment deprivation; it is prone to seasonal variances, and is not a universal benefit paid to people who would be considered as deprived in terms of employment. The employment deprivation IMD is based on a wider range of indicators. The IMD also reports at Lower Super Output Areas (LSOAs), which means that it is comparable with other Census data and IMD indicators. However, the JSA data</p>

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		<p>is only available at ward level and may include one or more LSOAs depending on location and population.</p> <p>Page 73 5.2.4 Noted. The section on Cultural Heritage will be reviewed (and re-titled as Historic Environment) to include information on undesignated heritage assets and known and unknown archaeological sites, as requested by Historic England. Specific information regarding the Broads will also be included.</p> <p>Table 8 – The note regarding the Broads Authority is not needed in the other rows of the table because the data on these designations are provided by Historic England for the whole of Norfolk. The note is included in the table for Conservation Areas because they are designated by the LPAs and the Conservation Areas in the Broads are also in other Local Planning Authority Areas.</p>
90376	<p><b>5.3 Task A2: Evolution of the Sustainability Baseline</b></p> <p>Respondent: <b>Broads Authority (Natalie Beal) [16282]</b> Received: <b>14/4/2015 via Email</b></p> <p>Page 100, 5.3.7 - This section should refer to designated landscapes as well as the setting of designated landscape settings.</p>	<p>Section 5.3.7 of the Sustainability Appraisal, regarding landscape, will be amended to also refer to designated landscapes and their settings.</p>
90377	<p><b>6. Task A3: Sustainability Problems, Issues and Recommendations</b></p> <p>Respondent: <b>Broads Authority (Natalie Beal) [16282]</b> Received: <b>14/4/2015 via Email</b></p> <p>Table 11</p>	<p>Table 11: Air – Avoiding AQMAs will be specifically mentioned in the recommendation column of the table. Core Strategy Policy CS15 already requires proposals to consider the potential for minerals or waste materials to be transported by</p>

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	<p>* Air: is there merit in using the water for transport? Is avoiding AQMAs a recommendation (this is referred to elsewhere in the document)?</p> <p>* Biodiversity: Is there scope in restoration benefitting biodiversity?</p> <p>* Landscape: Broads should be mentioned. Is there scope in exploring landscape buffers or landscaping to sites?</p> <p>* Cultural Heritage: talk about opportunities for understanding archaeology and geodiversity</p>	<p>water. Table 11 will be amended to specifically refer to considering transportation by water. Biodiversity – this part of the table will be amended to also mention opportunities from development to understand geodiversity. This part of the table will also be amended to refer to the enhancement of biodiversity (as well as habitats) through restoration, and to also refer to opportunities for biodiversity improvements through restoration in the ‘recommendations’ column. It should be noted that there is an existing Policy DM14 on restoration.</p> <p>Landscape – This section of the table will be amended to refer to the Broads as well as the AONB and Heritage Coast. The existing reference to appropriate location and design of sites will be amended to specifically refer to landscaping.</p> <p>Cultural heritage (to be retitled as Historic Environment) – this part of the table will be amended to also mention opportunities from development to understand archaeology.</p>
90378	<p><b>7. Task A4: Development of SA/SEA Objectives</b></p> <p>Respondent: <b>Broads Authority (Natalie Beal) [16282]</b> Received: <b>14/4/2015 via Email</b></p> <p>Generally the SA could separate out various designations and types of Cultural Heritage. I.e. Archaeology, SMs, Listed Buildings and Conservation Areas or give a concise definition of Cultural Heritage.</p> <p>Page 112 - Table 13 SA5 - first real mention of archaeology and appreciating new finds.</p>	<p>Historic England has also raised comments about information on the historic environment and archaeology contained within the Sustainability Appraisal. Therefore, references to ‘Cultural Heritage’ in the SA will be amended to ‘Historic Environment’.</p> <p>The SA will also be amended to include Norfolk’s non-designated heritage assets in the baseline information and to provide additional information on known and unknown</p>

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	Page 114 - Table 14 SA5 - suggest the issue of new finds is repeated here.	<p>archaeological sites. Therefore the relevant sections of the SA regarding the historic environment will be revised, which will also provide the clarification suggested by the Broads Authority.</p> <p>Page 114 – Table 14 SA5 – an additional bullet point will be added as follows: “Would implementation of the policy potentially enable the discovery of new archaeological finds?”</p>
90379	<p><b>7. Task A4: Development of SA/SEA Objectives</b></p> <p>Respondent: <b>Broads Authority (Natalie Beal) [16282]</b> Received: <b>14/4/2015 via Email</b></p> <p>SA Objectives</p> <p>1: does not mention reducing contributions or adaptation.</p> <p>4: Accessibility to or of what? It is not clear how, as worded, this relates to Minerals and Waste.</p> <p>5: make implicit that cultural heritage includes archaeology.</p>	<p>SA Objective 1 will be amended to also refer to adapting to climate change and will refer to reducing contributions to climate change instead of referring specifically to greenhouse gas emissions, as follows: “SA1 - To adapt to and mitigate effects of climate change by reducing contributions to climate change.”</p> <p>SA Objective 4 will be amended to state “To improve accessibility to jobs, services and facilities and reduce social exclusion” to clarify this objective. This relates to minerals and waste as these facilities create employment and potential restoration schemes may incorporate enhanced public access. Some waste management facilities are also open for local residents to use for waste recycling and disposal.</p> <p>SA Objective 5 will be amended to refer to the historic environment instead of cultural heritage as this will more clearly include archaeology.</p>

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90405	<p><b>4. Task A1: Relationship with International, European, National and Local Plans, Policies and Strategies</b></p> <p>Respondent: <b>South Norfolk District Council (Ms Carole Baker) [16423]</b> Received: <b>17/4/2015 via Email</b></p> <p>We have no comments to make on the Sustainability Appraisal document other than to note that South Norfolk Council hope to be in a position to adopt the Site Allocations and Policies document, Development Management Policies document and Wymondham Area Action Plan in July 2015. We submitted the Long Stratton Area Action Plan for examination in March 2015 and we will shortly be undertaking preferred options consultation on our gypsy and traveller document.</p>	Noted
90413	<p><b>Task A2: Sustainability Baseline Conditions</b></p> <p>Respondent: <b>Natural England (Ms Louise Oliver) [1874]</b> Received: <b>20/4/2015 via Email</b></p> <p>Natural England is satisfied that the Scoping Report for the Sustainability Appraisal (SA) has outlined the relevant baseline information with regard to the environment, particularly at this high level stage. The SA objectives are appropriate and cover the key sustainability issues in relation to biodiversity, geodiversity and soil in Norfolk.</p>	Noted
90452	<p><b>4. Task A1: Relationship with International, European, National and Local Plans, Policies and Strategies</b></p> <p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b> Received: <b>20/4/2015 via Email</b></p> <p>The report should consider not only mineral plans but emerging mineral plans from mineral planning authorities within which silica sand resources exist or are expected to exist</p> <p>Table 5: The Cheshire West and Chester Local Plan has been adopted</p>	<p>Table 5 – The Cheshire West and Chester Local Plan is included in the review of plans and policies table. The fact that it is now adopted is noted.</p> <p>Cheshire East Local Plan will be included in the review of plans and policies table.</p>



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	<p>The Cheshire East Local Plan is well advanced although temporarily suspended Sibelco questions why non-glass silica sand resources are not included since this is a silica sand review not a glass silica sand review</p> <p>Table 6: LDF 6 - why is "Agricultural Land Classification - Protecting the best and most versatile agricultural land" included under Traffic Impacts? LDF 1 - Key Message in Sources - There should be a reference here to at least 15 years to accord with NPPF paragraph 146.</p> <p>A number of other emerging strategic documents are important for consideration. These include:-</p> <ul style="list-style-type: none"> <li>* The House of Commons Select Committee for the Department for Business Innovation and Skills report on the Extractive Industry published on 28 October 2014</li> <li>* The Government response to the BIS committee report on the Extractive Industry published on 19th February. (<a href="http://www.publications.parliament.uk/pa/cm201415/cmselect/cmbis/939/93904.htm">http://www.publications.parliament.uk/pa/cm201415/cmselect/cmbis/939/93904.htm</a>)</li> <li>* The UK Mineral Extraction Industry (April 2015) - CBI Minerals Group (Draft) - This report informs the reader on the key characteristics of the UK mineral extraction industry, including energy, the extraction of construction and industrial minerals, along with the manufacture of mineral products. It is produced as part of the UK Minerals Strategy prepared by the UK mineral extractive industries.</li> <li>* EU MINATURA Project - The project will consider the extent of mineral deposits available within the EU, and access and supply problems of those deposits, in relation to the land use/policy constraints and opportunities, and specifically in relation to: <ul style="list-style-type: none"> <li>1 The restrictive nature of; or lack of; or ineffectiveness of, policy and mechanisms to prevent minerals and associated infrastructure being unnecessarily sterilised by other development or which prevents de facto access due to some form of environmental designation.</li> <li>2 The need for the EU and each member state to have some form of high level</li> </ul> </li> </ul>	<p>Mineral Planning Authorities which only have non-glass silica sand resources are not included because Norfolk County Council is required to plan for silica sand extraction due to the existing processing plant at Leziate. The purpose of the processing plant is to produce glass sand. (See our response to representation 90445 for a fuller explanation).</p> <p>Table 6: LDF 6 – we agree that the reference to the agricultural land classification should be deleted from this row of Table 6 as it is not relevant to SA objective SA3. LDF 1 – comment noted, although the reference to at least 15 years in the NPPF is in relation to permitted reserves, i.e. sites with planning permission, rather than allocated sites.</p> <p>The other emerging strategic documents detailed in Sibelco’s consultation response will be considered in the SA review of plans, policies and programmes. Two of the documents referred to were published after the SA Scoping Report was written. The 3 year EU Minatura Project only began in February 2015 and therefore has not published anything yet.</p>

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	policy commitment to devolve to and/or set the national agenda in each MS for the relevant land use planning process/decision process, to enable access to minerals.	
90453	<p><b>5.1 Task A2: Introduction and Sustainability Baseline Summary</b></p> <p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b> Received: <b>20/4/2015 via Email</b></p> <p>For additional important information sources to supplement the baseline data in the Scoping Report - See response to question 1.</p>	Noted
90454	<p><b>5.2 Task A2: Description of Current Sustainability Baseline</b></p> <p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b> Received: <b>20/4/2015 via Email</b></p> <p>We find some contradiction between a section of section 5.2.6 which on page 81 which says "Development in these areas (river valleys) not only has adverse effects on the landscape but also on flood risk, soil and water quality" and part of section 5.2.8 on page 84 which says " ... with a well-designed restoration scheme there is opportunity for mineral extraction to increase flood storages areas ..... ".</p> <p>Working in river valleys can have positive effects and well managed operations will not adversely affect water quality, landscape, flood risk or soil.</p>	<p>The reference in section 5.2.6 on page 81 refers to Core River Valleys which are mapped in the adopted Policies Map and protected through Policy DM2 in the adopted Core Strategy, which is a landscape designation. However as development in river valleys can also have adverse impacts on other issues such as flood risk, soil and water quality they are also mentioned. Workings in the river valley have the potential to result in increased flood risk by impeding the use of the flood plain through structures such as bunds which result in higher downstream flows in high rainfall events. However, this can be mitigated in certain working schemes and well-designed restoration does have the potential to increase capacity through the creation of features which act as attenuation basins within the flood plain. Therefore the potential exists both for mineral workings to increase flood risk, if poorly designed working schemes are put in place which restrict flows onto the floodplain in high flow events, whilst equally, a well-designed restoration scheme can improve capacity.</p>

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		<p>These circumstances exist in different time frames and are dependent on the quality of both the working and restoration scheme, so no contradiction exists.</p> <p>To provide clarification, the relevant sentence in section 5.2.6 on page 81 of the SA will be amended to state “Development in these areas not only has adverse impacts on landscape, but also has the potential to adversely affect flood risk, soil and water quality.”</p>
90455	<p><b>5.3 Task A2: Evolution of the Sustainability Baseline</b></p> <p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b> Received: <b>20/4/2015 via Email</b></p> <p>The final sentence of section 5.3.1 fails to note container glass sand (clear bottles and jars) which is an important end use of silica sand supplied from Norfolk. Sibelco concurs with the final two sentences on page 100 referring to the need to balance the need for sustainable growth with the need to mitigate any potentially adverse effects and for quarry developments to seek to deliver high quality landscapes and green infrastructure, where this is appropriate for the restoration concept and setting of the site.</p> <p>While there may be a preference to seek to locate mineral development on lower agricultural soil grades (3b, 4 and 5), for silica sand resources this will potentially further restrict developable areas and historically government guidance noted that development for silica sand would not be inappropriate on higher grade soils.</p> <p>Sibelco endorses the views expressed in the first two paragraphs of section 5.3.10 in relation to planning for growth and supply of minerals.</p> <p>Table 11 (Cultural Heritage) - we are not clear how heritage assets can be enhanced through restoration schemes unless this could be to seek to provide</p>	<p>The final sentence of section 5.3.1 does not refer to container glass because this section refers to the effect on the sustainability baseline from planned growth allocated in Local Plans. This section therefore links the need for window glass to planned construction of housing.</p> <p>Section 5.3.7 – the paragraphs on agricultural land and mineral extraction on page 101 simply summarise the existing local and national policy. Existing policies detail the circumstances in which development on BMV agricultural land will be permitted. Taking into account the consultation responses preferred areas/areas of search for future silica sand extraction are now only planned to exclude agricultural land grades 1 and 2. These agricultural land grades affect a significantly smaller area of the silica sand resource.</p> <p>Heritage – The reference to enhancement of heritage assets through restoration schemes was intended to refer to enhancing the setting. It is recognised that mineral working can enable</p>

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	<p>access to available heritage assets. Routinely minerals development provides the funding necessary to fully investigate cultural heritage and archaeological finds, providing detailed insight in to historical environs.</p>	<p>the investigation of heritage assets and archaeological finds and Table 11 will be amended to make this more explicit.</p>
90456	<p><b>7. Task A4: Development of SA/SEA Objectives</b></p> <p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b> Received: <b>20/4/2015 via Email</b></p> <p>Table 13: SA1 and SA11 - We cannot see the relevance of the scoring in relation to local settlements in terms of silica sand extraction and reducing greenhouse gas emissions. The Table at the top of page 116 shows the same scoring (+) for "Positive Effect" and "Positive and Negative Effects". Should the latter be (+-) ?</p>	<p>Agreed that for SA1 and SA11 the distance from settlements is not relevant in terms of silica sand extraction and reducing greenhouse gas emissions. The scoring will be amended, in the Sustainability Appraisal Report, to refer to the distance of silica sand extraction sites from the existing processing plant at Leziate.</p> <p>Agreed that the table at the top of page 116 should be corrected so that the positive and negative effects are shown by scoring +/- . This will be corrected in the Sustainability Appraisal Report.</p>
90465	<p><b>4. Task A1: Relationship with International, European, National and Local Plans, Policies and Strategies</b></p> <p>Respondent: <b>Environment Agency (Ms Louisa Johnson) [16424]</b> Received: <b>23/4/2015 via Email</b></p> <p>We would like you to consider including in the 'Further sources of guidance or advice' section reference to our "Groundwater Protection: policy and practice (GP3)" documents, available here: <a href="http://www.environment-agency.gov.uk/research/library/publications/144346.aspx">http://www.environment-agency.gov.uk/research/library/publications/144346.aspx</a> Particularly applicable are: Position Statement E1 is as it highlights our requirements when assessing risks to controlled waters from proposed landfill sites on former mineral extraction areas; Position Statements J3 to J5 as they highlight our role in assisting with land contamination issues; and Position Statements K1 and K2 which highlights our approach to environmental impacts of mining.</p>	<p>As requested, the relevant section of the Sustainability Appraisal will be amended to include reference to the Environment Agency's 'Groundwater Protection: Policy and Practice (GP3).</p>

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90463	<p><b>5.1 Task A2: Introduction and Sustainability Baseline Summary</b></p> <p>Respondent: <b>Environment Agency (Ms Louisa Johnson) [16424]</b> Received: <b>23/4/2015 via Email</b></p> <p>We have no additional sources of baseline data to supplement the baseline data already included in the Scoping Report.</p>	Noted
90464	<p><b>5.2 Task A2: Description of Current Sustainability Baseline</b></p> <p>Respondent: <b>Environment Agency (Ms Louisa Johnson) [16424]</b> Received: <b>23/4/2015 via Email</b></p> <p>In part 5.2.8, the report discusses dewatering of mineral sites to work the material dry. You should note that the 'Hydrogeological risk assessment' (HRA) which is required by us and the Mineral Planning Authority is not just to protect groundwater quality. It is also primarily to protect the groundwater levels in the area around the quarry and to protect both other groundwater abstractors and also any ecosystems and surface water features that are reliant of the groundwater levels in those areas. We also require within the HRA a proposal of mitigation measures should the site's dewatering impact upon the above mentioned features.</p> <p>The report also correctly identifies that importation of fill (even if inert) to restore an old quarry requires an impermeable barrier isolating the fill from the surrounding groundwater. However it should be made clear that the implementation of an impermeable barrier needs to be assessed by us to determine how the barrier blocks groundwater flow. Any blockage of groundwater flow has the potential to affect groundwater levels, reducing levels down gradient of the site and raising levels up gradient of the site. This can cause both ecological damage and derogation down gradient, and groundwater flooding up gradient.</p>	<p>The clarification of the purpose of the Hydrogeological Risk Assessment is noted. Section 5.2.8 of the Sustainability Appraisal will be expanded to include reference to groundwater levels as well groundwater quality.</p> <p>Section 5.2.8 of the Sustainability Appraisal will be amended, as requested, to provide further information on potential impacts of impermeable barriers on groundwater and the Environment Agency's assessment role.</p>
90466	<p><b>6. Task A3: Sustainability Problems, Issues and Recommendations</b></p>	

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	<p>Respondent: <b>Environment Agency (Ms Louisa Johnson) [16424]</b> Received: <b>23/4/2015 via Email</b></p> <p>We agree with the sustainability issues and problems identified so far. However, we would note that there is no mention of potential risks to human health from gas emissions from mineral extraction and waste management facilities. It is important for this to be considered to ensure risks from potential gas migrations are assessed and mitigated by adoption of protective measures, where necessary.</p> <p>Furthermore, there is no consideration of previous land uses, a desk study and assessment of risks to the water environment from previous land uses which may have caused pollution in proposed mineral extraction and waste management facility locations should be carried out.</p> <p>To summarise, clear and concise information of what the requirements are when it comes to assessing land which is known or suspected to be contaminated will be required.</p>	<p>The Sustainability Appraisal will be amended to include information on potential risks to human health from gas emissions from mineral extraction and waste management facilities, as requested.</p> <p>As requested, the Sustainability Appraisal will be amended to include the consideration of previous, potentially contaminating, landuses which may have caused pollution in proposed mineral extraction and waste management facility locations.</p> <p>However, it is considered that mineral extraction is most likely to take place on land that has not previously been developed.</p>
90467	<p><b>7. Task A4: Development of SA/SEA Objectives</b></p> <p>Respondent: <b>Environment Agency (Ms Louisa Johnson) [16424]</b> Received: <b>23/4/2015 via Email</b></p> <p>We support the objectives in particular objectives SA10 and SA12.</p> <p>Previous land uses should be taken into account when scoring sites and a desk study and assessment of risks to the water environment from these potential contaminating uses should be carried out to inform the scoring process.</p>	<p>The scoring factors for sites assessed against objective SA10 will be amended to include previous land uses and the risk to the water environment from previous land uses due to the development of the site. However, it is considered that mineral extraction is most likely to take place on land that has not previously been developed.</p>
90476	<p><b>4. Task A1: Relationship with International, European, National and Local Plans, Policies and Strategies</b></p> <p>Respondent: <b>Historic England (Ms Kayleigh Wood) [15387]</b> Received: <b>28/4/2015 via Email</b></p>	<p>The review of plans, programmes and strategies</p>

Rep ID	Representation Details	Norfolk County Council officer response
	<p>In addition to those listed within Table 3 we would also advise the consideration of the following:  * The Convention on the Protection of Archaeological Heritage of Europe (Granada Convention)</p> <p>In addition to those listed within Table 4 we would also advise the consideration of the following:  * Planning (Listed Buildings and Conservation Areas) Act (1990)  * Historic England- Conservation Principles, Policy and Guidance - <a href="http://historicengland.org.uk/images-books/publications/conservation-principles-sustainable-management-historic-environment/">http://historicengland.org.uk/images-books/publications/conservation-principles-sustainable-management-historic-environment/</a>.</p> <p>In addition to those listed within Table 5 we would also advise the consideration of Local Authority Local Lists (of non-designated heritage assets) and Neighbourhood Plans.</p>	<p>in the Sustainability Appraisal will be amended, as advised, to include those documents detailed in Historic England's consultation response.</p>
90477	<p><b>5.1 Task A2: Introduction and Sustainability Baseline Summary</b></p> <p>Respondent: <b>Historic England (Ms Kayleigh Wood) [15387]</b>  Received: <b>28/4/2015 via Email</b></p> <p>Please note that Historic England have produced guidance entitled 'Strategic Environmental Assessment, Sustainability Appraisal and The Historic Environment.' Where we have made comment, below, further guidance on how to address these issues can be found in this document. See the link below:</p> <p><a href="https://www.historicengland.org.uk/images-books/publications/strategic-environmental-assessment-sustainability-appraisal-historic-environment/">https://www.historicengland.org.uk/images-books/publications/strategic-environmental-assessment-sustainability-appraisal-historic-environment/</a>.</p> <p>Please note that all reference to 'English Heritage' should be changed within the document to 'Historic England'. The organisation has been divided into two, English Heritage being responsible for the charity's properties and Historic England being responsible for government advice on the Historic Environment.</p> <p>We would also encourage you to work with local conservation and archaeology officers in the preparation of the SA/SEA.</p>	<p>Noted.</p> <p>Reference to English Heritage in the Sustainability Appraisal will be changed to 'Historic England'.</p>

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90475	<p><b>5.2 Task A2: Description of Current Sustainability Baseline</b></p> <p>Respondent: <b>Historic England (Ms Kayleigh Wood) [15387]</b> Received: <b>28/4/2015 via Email</b></p> <p>In terms of the baseline data, at point 5.2.4 and 5.5.3 we would advise that 'Cultural Heritage' is amended to read 'Historic Environment', this is a wider heading which encompasses all aspects of heritage such as the physical built heritage and the less tangible cultural heritage. We note and welcome that the designated Heritage Assets have been explored and mapped however it also considered Norfolk's non-designated heritage assets should also be explored and form part of the baseline data. Details of such assets are held on the Norfolk's Historic Environment Record (HER) and Local Lists compiled by Local Authorities. We also consider that this section should highlight the important contribution of the setting of heritage assets. Further advice on the importance of the setting can be seen here: <a href="http://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/">http://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/</a>. There is also limited reference to known or unknown archaeological sites. Sites which have or have the potential for unknown archaeology should be acknowledged and explored, again the HER may provide data for such information.</p>	<p>'Cultural Heritage' will be amended to 'Historic Environment' as requested.</p> <p>As requested, the Sustainability Appraisal will be amended to include Norfolk's non-designated heritage assets in the baseline information. The SA will also be amended to highlight the important contribution of the setting of heritage assets, as requested. The SA will be amended to provide additional information on known and unknown archaeological sites, as requested.</p>
90474	<p><b>5.2 Task A2: Description of Current Sustainability Baseline</b></p> <p>Respondent: <b>Historic England (Ms Kayleigh Wood) [15387]</b> Received: <b>28/4/2015 via Email</b></p> <p>As indicated above and in terms of the document generally, we are particularly concerned that no reference is made to non-designated heritage assets. The historic environment of Norfolk is more than just the sum of its designated heritage assets; non-designated assets make up an important and valued part of this and it is important they are acknowledged. Their protection is also required by the NPPF. Therefore they should be reflected in the SA. Details of such assets are held on the Norfolk's HER and Local Lists compiled by Local Authorities. As highlighted above, there is also limited reference to known or unknown archaeological sites. Sites which have or have the potential for unknown archaeology should be acknowledged and explored.</p>	<p>As requested, the Sustainability Appraisal will be amended to include Norfolk's non-designated heritage assets. The SA will also be amended to provide additional information on known and unknown archaeological sites, as requested.</p>



Rep ID	Representation Details	Norfolk County Council officer response
90473	<p><b>6. Task A3: Sustainability Problems, Issues and Recommendations</b></p> <p>Respondent: <b>Historic England (Ms Kayleigh Wood) [15387]</b> Received: <b>28/4/2015 via Email</b></p> <p>We do agree with the sustainability issues which have arisen with regard to the Historic Environment, as highlighted in Table 11. As outlined above we would advise that the 'Cultural Heritage' topic is changed to 'Historic Environment' for consistency. If the physical assets are completely avoided then we agree that there is a potential for minerals and waste development to affect the setting of heritage assets but there is also the potential for unknown archaeological sites to be unacceptably impacted or damaged. We also agree that heritage assets could be protected/ or enhanced through the appropriate location and design of minerals and waste developments and that there could be the opportunity to provide enhancement through restoration schemes. It should be noted however, that each site should be judged on a case by case basis and impacts will not always be able to be mitigated against. In addition, there may be the opportunity to use discovered sites, in terms of archaeology, as an educational resource.</p>	<p>The 'Cultural Heritage' topic will be amended to 'Historic Environment', for consistency, as requested.</p> <p>The table will be amended to note that there is also the potential for unknown archaeological sites to be unacceptably impacted or damaged by minerals and waste management development.</p> <p>It is noted that potential impacts on the historic environment will not always be able to be mitigated against.</p> <p>The table will be amended to recognise the potential for archaeology, discovered through development, to be used as an educational resource.</p>
90472	<p><b>7. Task A4: Development of SA/SEA Objectives</b></p> <p>Respondent: <b>Historic England (Ms Kayleigh Wood) [15387]</b> Received: <b>28/4/2015 via Email</b></p> <p>Turning to the SA assessment objectives, as highlighted in table 12 and 13, as above we would advise that reference to the 'Cultural Heritage' topic is changed to the 'Historic Environment' for consistency. We welcome the protection and enhancement of the character of townscape and 'cultural heritage' generally. In terms of the factors which should be taken into account when scoring each site, we would also recommend the inclusion of two bullets namely:</p> <ul style="list-style-type: none"> <li>* Would working the site impact on non-designated heritage assets?</li> <li>* Would working the site potentially impact on unknown archaeological sites?</li> </ul>	<p>Reference to the 'Cultural Heritage' topic will be amended to 'Historic Environment', for consistency, as requested.</p> <p>Factors to be taken into account in scoring minerals site policies against objective SA5 will be amended to include the two factors requested, as follows:</p> <ul style="list-style-type: none"> <li>*Would working the site impact on non-designated heritage assets?</li> <li>* Would working the site potentially impact on unknown archaeological sites?</li> </ul> <p>These factors will be assessed through consultation with the Norfolk Historic Environment Service and Historic England.</p>

**'No comment' responses received**

<b>Rep ID</b>	<b>Representation Details</b>	
90349	Respondent: <b>North Norfolk District Council (Martha Moore) [16411]</b> No comment	Received: <b>20/03/2015 via email</b>
90350	Respondent: <b>Surrey County Council (Maureen Prescott) [16412]</b> No comment	Received: <b>19/03/2015 via email</b>
90352	Respondent: <b>Office of Rail Regulation (A Harrison) [16415]</b> No comment	Received: <b>10/03/2015 via email</b>
90353	Respondent: <b>Bradwell Parish Council (Mr J Caborn) [1343]</b> The council has no objections to the proposals.	Received: <b>06/03/2015 via email</b>
90368	Respondent: <b>Middle Level Commissioners (Mr G Moore) [16418]</b> No comment	Received: <b>02/04/2015 via email</b>
90351	Respondent: <b>Norwich City Council (Mr J Bunting) [16413]</b> No comment	Received: <b>20/03/2015 via email</b>
90371	Respondent: <b>Breckland District Council (Mr Feng Li) [16421]</b> Through reviewing the mappings provided in the consultation document, none of the areas in Breckland are identified as within the inferred silica sand resources. It means that there are unlikely to be any impacts on the area and therefore the Council has no further comments to make at this stage.	Received: <b>15/04/2015 via email</b>
90380	Respondent: <b>Broadland District Council (Isabel Appleyard) [7992]</b> The District Council does not wish to make any representations on the Single Issue Review of Silica Sand - Initial Consultation document.	Received: <b>16/04/2015 via email</b>
90404	Respondent: <b>South Norfolk District Council (Carole Baker) [16423]</b> We do not have any comments to make with regard to the Silica Sand Single Issues Review as this does not have any direct impact on the South Norfolk district.	Received: <b>17/04/2015 via email</b>