13. Previous workings and current permissions

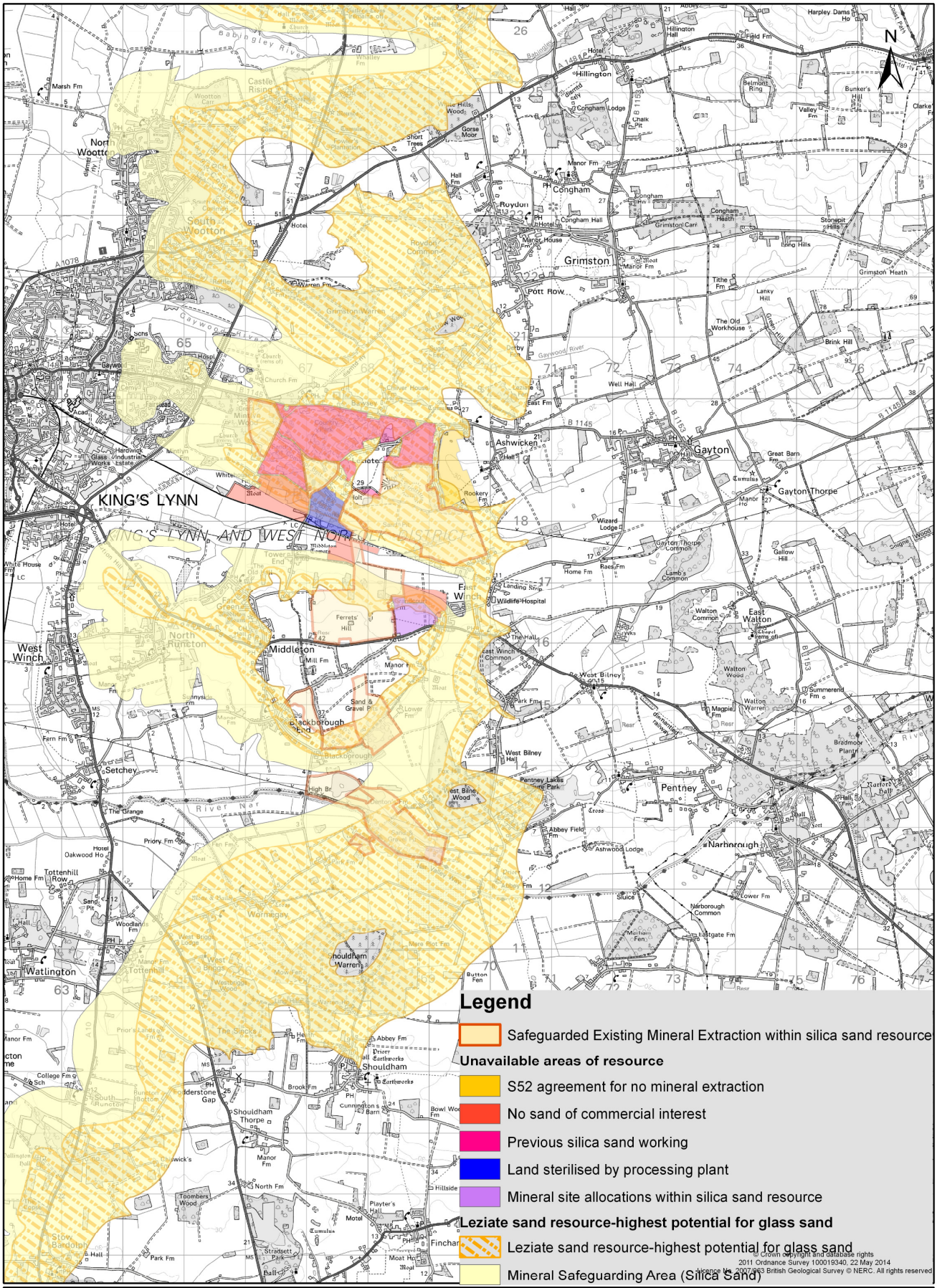
13.1 Silica sand has been worked in Norfolk for centuries; records exist of exports of glass sand from King's Lynn during the medieval period. Historically working of silica sand has occurred in the area to the east of King's Lynn chiefly in the parishes of Bawsey and Leziate. Areas including and surrounding the current Leziate processing plant were worked by Joseph Boam Ltd as sand quarries from the 1860s. This history of mineral working means that significant areas of the mineral resource have already been worked for silica sand and should be discounted from the areas to be considered as part of this review.

13.2 There are also areas of resource which are covered by current planning permissions and the reserves within these permissions have already been counted in arriving at the quantity of additional allocations needed through the review. There is also an area of land which is partly within the silica sand resource which is covered by a Section 52 legal agreement which precludes silica sand extraction on the land.

13.3 The areas known to be previous workings or workings which have current planning permissions or are mineral allocations are shown on the following map.

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.

Relevant chapter of the National Planning Policy Framework: 13. Facilitating the sustainable use of minerals Relevant Norfolk Minerals and Waste Core Strategy Policies: None Relevant King's Lynn and West Norfolk Core Strategy Policies: None



14. Extent of deposits

14.1 The British Geological Survey (BGS) produced a Mineral Resources Map which outlines inferred mineral resources at the surface. This is the basis for the Mineral Safeguarding Areas within the adopted Norfolk Minerals and Waste Core Strategy. However, in relation to silica sand it is known that viable resources exist under surface deposits of other minerals, in particular carstone. A number of previous and current workings and planned allocations for silica sand extraction have wholly or partially taken place in areas where carstone is the superficial deposit. It is known from previous studies that the Upper Cretaceous Carstone sits unconformably on the Sandringham Sands deposits within which the Mintlyn and Leziate Beds of silica sand exist. This is most likely to occur where the Sandringham Sands and the Carstone deposits are in close proximity.

14.2 It is therefore proposed that Norfolk County Council will accept potential Specific Sites for silica sand extraction from within the carstone deposit subject to:

- evidence in the form of borehole logs and analysis to indicate that the quality and grade of silica sand is suitable for glass manufacture, and that the depth of carstone/overburden is such that the working of the deposit would be commercially viable; and
- evidence to support the proposal in line with all other requirements contained in the review.

14.3 It is known that in some locations where the Sandringham Sands underlie the carstone, the quality and grade of the silica sand is high and that these deposits meet the requirements for glassmaking. It can be implied that the carstone and/or the thin clay layer which occurs unconformably at the junction of the carstone and silica sand in these cases may have restricted the flow of material which might act as a contaminant.

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.

14.4 If insufficient suitable Specific Sites are proposed in response to the 'call for sites', the County Council would continue the review process by defining Preferred Areas or Areas of Search. It is currently proposed that such areas would exclude from consideration areas from outside the inferred silica sand mineral resource from the British Geological Survey (BGS) sources.

14.5 As the demand for silica sand is specifically related to glass sand it is also proposed that there should be a preference for Preferred Areas or Areas of Search to be located within the Leziate beds, as this deposit has the highest probability of providing deposits of a suitable quality and grade for this use.

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.

Relevant chapter of the National Planning Policy Framework: 13. Facilitating the sustainable use of minerals Relevant Norfolk Minerals and Waste Core Strategy Policies: CS16 – Safeguarding mineral and waste sites and mineral resources