Main Matter 3 – Whether the Plan makes adequate provision for the steady and adequate supply of aggregate and industrial minerals.

1. Is the basis for the calculation of the future demand for sand and gravel, carstone and silica sand clear and robust enough in order to provide an appropriate basis for determining future demand.
2. Is the application of an additional 10% to the 10-year average sale figures sufficient to predict the forecast need for sand and gravel and Carstone over the Plan period?
3. To what extent does the Local Aggregate Assessment (LAA) for calendar year 2022 (February 2024) have any effect on the calculation of the future demand for sand and gravel, Carstone and silica sand.
4. Does the calculation of the forecast need for sand and gravel, Carstone and silica sand adequately reflect the need to maintain a relevant lankbank at the end of the Plan period?
5. Is Policy MP1 consistent with the NPPF paragraph 214 and footnote 74? Paragraph 219 footnote77
6. Should Policy MP1 be more explicit about the need to maintain landbanks at the end of the Plan period?
7. In considering mineral extraction proposals for sand and gravel outside of allocated sites, should Policy MP1 provide a degree of flexibility by referring to the need to demonstrate shortfall in meeting demand or failure to maintain the landbank would be contributing factors to justify proposals?

Breedon Trading Ltd (Breedon) is a leading supplier of aggregates, cement, ready-mixed concrete, asphalt and specialist construction products and services. Breedon considers the Plan (Document A1) as drafted is unsound and not effective, as it has not made sufficient provision to maintain a steady and adequate supply of sand and gravel reserves to meet expected demand.

Breedon believe the Plan is unsound because the calculation used by Norfolk County Council (NCC) for future demand allocation for sand and gravel:

- relies too heavily on historic 10-year sales, which are not reflective of market conditions;
- does not clearly/appropriately consider future growth projections set out in its local aggregates assessments;
- overestimates the existing permitted reserves used in the Plan and this has not been updated, as new evidence has come forward.
- not all allocated sites will come forward;
- the reserves in potential plan sites promoted by operators are resource estimates and may differ from the final workable reserve due to mitigation measures and biodiversity net gain;
- there is no analysis of productive supply of allocated sites.
- there is no provision at the end of the Plan period for a seven-year landbank and as such NCC will need to review this Plan, if adopted, significantly earlier than the 2038 end date to ensure the landbank is maintained and rolled forward.

The result of this is under provision of sand and gravel, meaning that the Plan does not meet the soundness tests of the National Planning Policy Framework (NPPF) in paragraph 16. It is not sustainable as it does not allow for identified socio-economic growth and so provision will not meet the Plan period. Nor is it positively prepared as it should be modified to reflect inaccuracies and recent data trends that have come to light.

Mineral Planning Authorities (MPAs) are required to make provision in their local plans to ensure the supply of aggregates over the Plan period. Such provision should take the form of specific sites, preferred areas and/or areas of search and locational criteria as appropriate. NPPF paragraph 219(f) requires MPAs to maintain a landbank of at least 7 years for sand and gravel and at least 10 years for crushed rock, whilst ensuring that the capacity of operations to supply a wide range of materials are not compromised. Footnote 77 states "*longer periods may be appropriate to take account of the need to supply a range of types of aggregates, locations of permitted reserves relative to markets, and productive capacity of permitted sites.*"

The Plan relies too heavily on 10-year sales.
Within Document B33 "Planning Advisory Service Local Plan Route Mapper Toolkit Part 4: Local Plan Soundness and Quality Assessment -Norfolk County Council Minerals and Waste Local Plan 2021-2038", NCC confirms under question 2, page 5:

> *"The planned provision for Sand and Gravel, and Carstone have been arrived at by having regard to the NPPG. Having looked at the sales in the previous 10- and 3-year periods, as well as other relevant information; it has been concluded that the use of a figure based on the 10-year rolling average plus an additional 10% to allow flexibility is an appropriate quantum to provide for a steady and adequate supply of these minerals."*

In this response to question 2 about identification for growth areas NCC also references LAA 2021 and 2022 (Evidence documents B4 and B3) in support of this answer, which covers aggregate data for years 2020 and 2021. The response whilst quoting the NPPF and referencing other information, appears heavily skewed to the average 10 years sales, plus a 10% buffer to cover an upward trend in sales indicated by the 3-year rolling average sales data, rather than a calculated response to the future housing, population and infrastructure demands also reported in these LAAs.

Breedon consider the Plan and Policy MP1 are unsound because they rely too heavily on 10-year average sales figure. Breedon consider the figure allocated is not reflective of market conditions and that other factors are important and should be considered and quantified too.

As already stated, the forecast need for the submission Plan (Document A1) is based on calculations using the 10-year sales average for sand and gravel (2011-2020) from the 2020 LAA (Document B4), with a ten percent buffer added. Planning Practice Guidance (PPG)- Paragraph: 064 Reference ID: 27-064-20140306 asks the question whether MPAs can prepare LAAs based solely on a 10-year average supply? PPG confirms that other

relevant information should be considered too. This includes looking ahead to future demand, levels of planned construction and housebuilding. The paragraph also suggests looking at the 3-year average sales.

Breedon consider that whilst NCC has gathered and published additional information in its annual LAAs on housing completions, population growth and proposed/ongoing infrastructure projects, it has made little attempt to forecast what this means for the supply and demand for sand and gravel over the Plan period.

Breedon also consider that as errors in reserve data has come to light during the preparation of the Plan, NCC should have updated the calculations used in Policy MP1, before submitting and now before adopting the Plan.

No consideration of future growth

Breedon consider that the 10 years average sales used is heavily compromised by external factors. As such they are not suitable to predict or to solely rely on for forecasts of future demand for sands and gravels. The 10-year period (2011-2020) used in the Plan (Document A1) for its calculations is taken from the LAA 2020 data (Document B4) which covers a turbulent period economically, which has impacted on the construction sector and in turn aggregate sales. It has been a period of austerity; 'Brexit; and was followed by the COVID pandemic. Whilst NCC has noted that the three years average sales for 2018-2020 show an upward trend, and as such has factored in a 10% buffer to allow for any upward movement, Breedon considers that even this shorter period includes the COVID pandemic (2020), where sales were impacted and so the upward trend could have been even greater.

The Plan (A1) uses a 10-year average of 1.37Mt, but this figure in the 2021 data LAA (Document B3) and the 2022 data LAA (Document D1) are higher at 1.39Mt for 2021 and 1.41Mt for 2022 respectively. Breedon believes that NCC in using a 10-year average sales figure from 2020 as a baseline within a period of low economic growth, with a 10 percent buffer calculation on this constrained economic average, means that the Plan will not be able to supply sufficient sites and reserves. There is no analysis to see if this calculation is sufficient to meet other factors such as predicated population growth, expected housing completions and infrastructure allocations, productive capacity of extraction sites and issues with predicting final workable reserves.

Housing Growth - The 2020 data LAA (Document B4) which is the database for the Plan, indicates that within each Norfolk district there are still considerable numbers of new homes allocated which have not been completed (Document B4, pages 6.2.1-6.2.9). The 2022 data LAA (Document D1) identifies a 34.5% increase in housing completions compared to the historic completion rate over the past ten years.

Population Growth - The 2020 data LAA (Document B4) identifies population growth at around 10.8%. This growth is attributed to net immigration and an aging Norfolk population. Both types of population growth will put demands on different types of new accommodation and social infrastructure. Paragraph 6.2.1 of the 2022 data LAA (Document D1) uses the latest Office of National Statistics data, and this indicates that

Norfolk's population is likely to grow from 903,680 in 2018 to 1,009,508 in 2038, which is an increase of 11.7%.

Infrastructure Growth - The LAA 2020 (Document B4) provides a long list of ongoing and planned infrastructure projects. Appendix 1 of the 2022 data LAA (Document D1) lists the status of the proposed infrastructure projects in Norfolk and the surrounding counties, and many are set to be delivered over the submitted Plan period.

Overall, whilst NCC identify in the 2020 LAA (Document B4) that there are significant housing completions to be delivered in Local Plans, a growing population to be accommodated and many infrastructure projects underway and to be started there is no calculation or interpretation of this data as to whether use of the 10-year average sales and a 10 percent buffer is appropriate. In addition, the recent publication of the 2022 data LAA (D1) now indicates errors in data used in the Plan (A1) calculations and that also housing completion, population and infrastructure development growth are still indicating considerable growth over the Plan period.

Overestimation of existing landbank and allocated reserves.
The submitted Plan (Document A1) is based on the 2020 data from the 2021 LAA (Document B4). At the time the landbank stood at 10.6 years and had 14,511,385 tonnes of permitted reserves. However, as evidenced in the 2022 data LAA (Document D1), there is a considerable overestimation in the permitted reserves. The 2022 data LAA makes clear that *"*the permitted reserve figure for 2021 has been revised downwards from 15.75mt to 13.19mt to reflect saleable reserves rather than permitted reserves."* This downwards revision would be true for the 2020 data figure used in the Plan calculation too. Breedon consider this figure should be updated and the Plan and Policy MP1 calculations revised accordingly. Retaining the old figures and inaccuracies overestimates the possible reserve available from permitted sites and downplays need, resulting in under provision of sand and gravel. As such Breedon consider the Plan is not positively prepared.

Reserve Figures – Effect of Mitigation Measures
Breedon consider that whilst the Plan identifies estimated resources in the allocated sites, the workable reserve permitted may ultimately differ providing an additional reason for greater flexibility in the allocated reserve figures. The reserves promoted for sand and gravel sites are based on geological analysis of mineral boreholes across the promoted site. Whilst operators estimate the expected workable reserve, there can be differences and overestimations, due to geological conditions not picked up in surveys or boreholes, until extraction commences.

In addition, some allocated sites may find that the reserve needs to be revised downwards, to allow for greater mitigation measures than anticipated, once detailed environmental and amenity assessment have been undertaken at the planning application stage.

Haddiscoe is an allocated site in the submission Plan, MIN25, for some 1,300,000 tonnes of sand and gravel, and is a good example of why greater flexibility needs to be built in

over the 10 percent margin. The current planning application submitted to NCC is for 650,000 tonnes of gravel to be extracted at Haddiscoe, with the remaining 510,000 tonnes of sand to be extracted to be retained and placed back in the void. The site will yield significantly less workable reserve than allocated. The recovery of the gravel and not the sand reflects the need for additional gravel to blend with existing permitted sand rich deposit at Norton Subcourse, but also restoration design. The sand is to be retained at Haddiscoe to create a suitable restoration landform, without the need to import material, in order to meet policy restoration requirements for the site, in terms of providing a scheme which does not cause substantial harm to the historic landscape setting of the site and surrounding listed buildings. In addition, extraction margins applied for noise, archaeology and other mitigation measures mean that workable reserve is reduced.

Breedon consider the introduction of biodiversity net gain (BNG) may also reduce the yield of workable reserve in allocated minerals sites, as areas of high valued biodiversity, under the BNG calculator, may not be worked as they may be too expensive to replace as part of a restoration scheme. Similarly other areas of an allocated site may be retained to create areas for BNG enhancements rather than be worked. This is an extremely new legislative requirement and, as yet, the treatment of BNG in respect of the specific and unique context of minerals development is untested.

Sites Production Analysis

Breedon consider that NCC has done little analysis of how much sites will contribute to the landbank and annual production sales over the Plan period, and whether there is potential to respond to an increase in sales demand at any one time.

NCC states that the current sand and gravel landbank based on existing production rates looks reasonable, but NCC has not looked at the larger existing allocated sites and their proposed extensions, which are worked at relatively low production rates. Larger quarries such as East Binley, Beetley, East Beckingham and Earsham quarries help to maintain a healthy Norfolk sand and gravel landbank, but do not make a significant contribution to annual production sales and will not be able to increase production to respond to any upturn in demand.

Many of the allocated sites in the Plan will follow on as extensions to existing permitted quarries at similar production rates. Breedon believes projecting forward on this basis many of the sites will be worked out before the end of the Plan period, with one or two large, low production quarries remaining; resulting in a shortfall in provision, even if current production levels remain constant and do not increase.

Allocated Reserve in the Plan

The submitted Plan allocates 16 sites with 15.4 million tonnes of estimated resource expected to be extracted within the Plan period. The allocation of this estimated resource within these 16 sites may appear sufficient and in excess of the identified shortfall of some 12.597 million tonnes, but as discussed above:

- the need shortfall figure is underestimated because the permitted reserve figure for 2020 data used in the calculation for MP1 has not been amended downwards to reflect a downgrading of workable permitted reserves,

- there is no allowance for construction and socio-economic growth or calculation of what is required and
- there is no analysis of site production capacity for allocated sites;
- there is no allowance for mitigation measures required once detailed site assessment is undertaken, which may reduce the estimated resource.

Breedon considers this estimated resource still may not offer enough flexibility over the Plan period.

Proposed rewording of Policy MP1

As stated, PPG paragraph 219 suggests that the 10-year rolling average and the sub-national guidelines should all be considered to establish a broad understanding of current and future mineral demand, especially during reviews of planned provision. The submission Plan (Document A1) calculates the forecast need by adding a 10% buffer to the 10-year production average. For reasons given above Breedon considers this calculation is not flexible enough or correlated to any future demand to meet projected growth needs.

Earlier drafts of the Plan used a 20-year sales average to calculate future supply. Recently adopted minerals plans in the Eastern Region have added a 20% buffer figure to their ten-year average. Both the adopted Suffolk Local Plan 2021 and the draft replacement Essex Minerals Local Plan use a 20% buffer figure to reflect housing requirements. The Essex Plan has also made provision at the end of their Plan period for supply.

Breedon considers that either a 20-year sales average or 10-years sales average plus a 20% buffer offer greater flexibility to the Plan. The 20-year sales average would make allocated provision for some 17.079Mt. Alternatively, using the 10-year sales average and a 20% buffer would make provision for some 15.059Mt to be allocated in MP1.[1]

A third alternative would be to use the highest sand and gravel sales figure from the last ten years for each year of the Plan plus a 10% buffer. The justification for this approach, is that this was a period of economic stagnation and sales in the previous decade were considerably higher, averaging 2,141,400tpa. If development growth increases, as projected, Norfolk will struggle to meet demand. 2016 was the highest sales year over the last decade with 1,622,566 tonnes. If sales increase to meet future growth, this sales figure may be replicated more regularly over the Plan period. If this figure was applied to the Plan period with the 10% buffer this would mean that the Plan should make allocated provision for 17.616Mt[1]. The site resource figure identified in the allocated sites falls short of this level of sales.

Breedon considers the above methods would provide greater flexibility to the Plan for sand and gravel supply given the above discussion. Alternatively, NCC need to make

[1] These calculations use the 2020 uncorrected permitted reserve figure used by NCC in calculating the shortfall in reserve and does not allow for at least a 7-year landbank at the end of the Plan period. If this correction was made and a 7-year landbank provided at the end of 2038 these allocated reserve figures would be even greater.

positive provision in Policy MP1 for unallocated sites to come forward to maintain permitted reserves and meet growth based on LAA evidence and other factors.

Breedon requests the following changes are made to the wording of Policy MP1 to increase allocated sand and gravel resources available and/or to enable additional unallocated sites to come forward to meet the anticipated shortfall.

Policy MP1: Provision for minerals extraction – STRATEGIC POLICY

"For **sand and gravel**, specific sites to deliver at least **17.62 million tonnes**[1] of resources will be allocated. The sand and gravel landbank will be maintained at a level of at least 7 years' supply (excluding any contribution from borrow pits for major construction projects).

Mineral extraction for sand and gravel outside of allocated sites will be supported by the Mineral Planning Authority where the applicant can demonstrate:
There is a justification and/or overriding benefit for the proposed extraction having regard to:

- latest annual local aggregate assessment data
- the production capacity of other permitted sites
- whether a site can be worked as an extension to an existing site

These additional criteria would reflect closer Footnote 77 of Paragraph 219 of the NPPF.