

Update on the sand and gravel, Carstone and silica sand provision within the Norfolk Minerals and Waste Local Plan

This is an update note on the position of the Plan provision for sand and gravel, carstone and silica sand for the examination of the Norfolk Minerals and Waste Local Plan (NM&WLP) following the examination hearing sessions.

This note provides information on how the current position differs from the position set out in the submitted NM&WLP and is based on information contained in the latest published Local Aggregate Assessment (2022) (document B3), and the status of the proposed mineral extraction site allocations as at 31/12/2023.

Sand and gravel

The average sand and gravel production in Norfolk over the last 10 years in the submitted NM&WLP was 1.369 million tonnes per annum (mtpa) for the period 2011-2020. The updated 10 year rolling average (2013-2022) was 1.413 mtpa, resulting in an increase of 44,000 tpa.

The 3-year average has been similarly updated from 1.384mtpa (2018-2020) to 1.39mtpa (2020-2022).

Taking into account the 10-year and 3-year average and other relevant information it is considered that the use of an additional 10% of the 10-year average would provide flexibility to ensure a steady and adequate supply of aggregate in Norfolk. The updated figure for the 10% flexibility allowance would be 0.141mtpa. Using the updated figures means an adjustment to the forecast need for sand and gravel from 1.506mtpa to 1.554mtpa.

The total forecast need for sand and gravel for the Plan period to 2038 therefore changes from 27.108 mt (1.506mtpa x 18 years) in the submitted Plan to 24.864mt (1.554mtpa x 16 years). The reduction in years is to take into account that two further years of known production have passed.

Several proposed mineral extraction site allocations received planning permission during 2021. Therefore, the landbank of permitted reserves has changed from 14.511mt at 31/12/2020 to 17.954mt at 31/12/2022.

Therefore, when using the updated figures, the remaining forecast need for allocated sites is calculated to be:

24.864mt (Total forecast need) – 17.954mt (permitted reserves) = 6.91mt shortfall (need for allocated sites).

This is a reduction from 12.597mt forecast need for allocated sites in the draft NM&WLP as submitted.

The table overleaf shows the site allocations in the submitted NM&WLP together with the updated planning status as at 31/12/2023. A few of the proposed allocations have been subject to planning applications of which some have granted planning permission, and some are still being determined. Some of the site allocations for which permission has been granted now have their mineral reserves included within the landbank of permitted reserves. The proposed allocations not included within the landbank will provide an estimated 8.987mt of aggregate over the Plan Period to the end of 2038, more than meeting the calculated need for allocated sites of 6.91mt, as shown above.

Parish	Site reference	Location	Estimated total resource (tonnes)	Estimated resource (tonnes) available during the Plan Period 2021-2038	Planning status at 31.12.2023	Anticipated start date
Beetley	MIN 12	Land north of Chapel Lane	992,000	992,000	Planning application valid in November 2023 and being determined	2026
Beetley	MIN 51 & MIN 13 & MIN 08	Land west of Bilney Road	1,551,000	1,420,000	Planning application valid in July 2022 and being determined	2025
Carbrooke	MIN 200	Land west of Cuckoo Lane	400,000	400,000	No planning application	2025
Attlebridge	MIN 202	land south of Reepham Road	545,000	545,000	No planning application	2025
Frettenham and Buxton with Lammas	MIN 37	land at Mayton Wood, Coltishall Road, Buxton	1,450,000	N/A site received permission in 2021 so already included in the landbank	Planning permission (FUL/2019/0043) granted in June 2021 has been implemented	N/A
Horstead with Stanninghall	MIN 64	land at Grange Farm, Buxton Road, Horstead	650,000	N/A site received permission in 2021 so already included in the landbank	Planning permission (FUL/2020/0045) granted in May 2021 and has been implemented	N/A
Horstead with Stanninghall	MIN 65	land north of Stanninghall Quarry	3,745,000	N/A site received permission in 2021 so already included in the landbank	Planning permission (FUL/2020/0085) granted in August 2021 and has been implemented	N/A
Spixworth	MIN 96	land at Grange Farm (between Spixworth Road and Coltishall Lane)	1,600,000	1,600,000	No planning application	2025
Tottenhill	MIN 206	Land at Oak Field, west of Lynn Road	750,000	750,000	Planning permission (FUL/2021/0007) granted in October 2023	2024

Parish	Site reference	Location	Estimated total resource (tonnes)	Estimated resource (tonnes) available during the Plan Period 2021-2038	Planning status at 31.12.2023	Anticipated start date
Aylmerton	MIN 69	Land north of Holt Road	2,000,000	700,000 (northern part of the site received permission in 2020 so 1 million tonnes already included in landbank)	Planning permission (FUL/2019/0001) granted for northern part of site in October 2020 and has been implemented	N/A
North Walsham	MIN 115	Land at Lord Anson's Wood, near North Walsham	1,100,000	480,000	No planning application	2031
Edgefield	MIN 207	Land at Pinkney Field, Briston	400,000	N/A site received permission in 2019 so already included in the landbank	Planning permission (C/1/2018/1016) granted in August 2019 and has been implemented	N/A
East Beckham	MIN 208	Land south of Holt Road	1,320,000	800,000	No planning application	2031
Haddiscoe	MIN 25	Land at Manor Farm (east of Crab Apple Lane)	1,300,000	1,300,000	Planning application valid in December 2022 and being determined	2025
Totals	N/A	N/A	17,803,000	8,987,000	N/A	N/A

Carstone

The average carstone production in Norfolk over the last 10 years in the submitted NM&WLP was 0.075mtpa for the period 2011-2020. The updated 10 year rolling average (2013-2022) was 0.081mtpa, resulting in an increase of 5,846 tonnes per annum.

The 3-year average has been similarly updated from 0.067mtpa (2018-2020) to 0.098mtpa (2020-2022).

Taking into account the 10-year and 3-year average and other relevant information it is considered that the use of an additional 10% of the 10-year average would provide flexibility to ensure a steady and adequate supply of carstone in Norfolk. The updated figure for the 10% flexibility allowance would be 8,000 tpa. Using the updated figures means a small adjustment to the forecast need for carstone from 0.083mtpa to 0.089mtpa.

The total forecast need for carstone for the Plan period to 2038 therefore changes from 1.494 mt (0.083mtpa x 18 years) to 1.424mt (0.089mtpa x 16 years). The reduction in years is to take into account that two further years of known production have passed.

No additional Carstone reserves were permitted during 2021 or 2022. The landbank of permitted reserves has therefore reduced from 1.663mt at 31/12/2020 to 1.423mt at 31/12/2022.

When the updated figures are used to calculate the remaining forecast need for allocated sites this shows that permitted reserves meet the forecast need in the Plan Period with only a minimal forecast shortfall of 1,000 tonnes. This is compared to no forecast shortfall of Carstone in the submitted NM&WLP. However, it is still proposed to allocate mineral extraction site allocation MIN 06 to provide an estimated resource of 1,416,000 tonnes of carstone (with 960,000 tonnes expected to be extracted during the Plan period) to provide flexibility as the current permitted reserve is contained in only three sites.

Silica sand

The average silica sand production in Norfolk over the last 10 years in the submitted NM&WLP was 0.800mtpa for the period 2011-2020. The updated 10 year rolling average (2013-2022) was 0.826mtpa, resulting in an increase of 25,592 tonnes per annum. The 3-year average has been similarly updated from 0.815mtpa (2018-2020) to 0.792mtpa (2020-2022), which is a decrease of over 22,000tpa. 10-year average sales data and 3-year average sales data is provided to Norfolk County Council annually by Sibelco UK Ltd, but annual silica sand production data is not provided.

The NPPF makes a specific link between silica sand supply and the production of the plant that it is supplying; therefore, it is considered appropriate to forecast the need for silica sand extraction in Norfolk based on the maximum lawful throughput of the Leziate Processing Plant site, which is 754,000 tonnes of raw silica sand per annum. However, there is the potential for the processing plant throughput to be increased during the Plan period if a suitable planning application was submitted and granted. Therefore, the quantity of silica sand to be planned for will be at least the current maximum lawful throughput of the Leziate processing plant site.

The total forecast need for silica sand for the Plan period to 2038 therefore changes from at least 13.57 mt (0.754mtpa x 18 years) to at least 12.064mt (0.754mtpa x 16 years). The reduction in years is to take into account that two further years of known production have passed.

One of the adopted silica sand extraction site allocations (SIL01) was granted planning permission (for 1.2mt of silica extraction) in the period to 31/12/2022. Therefore, the landbank of permitted reserves has changed from 3.232mt at 31/12/2020 to 3.08mt at 31/12/2022.

Therefore, when using the updated figures, the remaining forecast need for additional silica sand reserves is calculated to be:

12.064mt (Total forecast need) – 3.08mt (permitted reserves) = 8.984mt shortfall (need for additional reserves).

This is a reduction from at least 10.34mt forecast need for additional mineral reserves in the submitted NM&WLP.

The other adopted silica sand extraction site allocation (MIN 40) was granted permission in June 2023 for 3.0 mt of silica sand extraction. However, this is not included within the published landbank figures, which are currently to 31/12/2022. There are no other proposed mineral extraction site allocations for silica sand, and the shortfall will be dealt with by applying Policy MPSS1 when determining planning applications submitted for silica sand extraction at unallocated sites.

Conclusion

Sand and gravel

Using the most recent published data from 31.12.2022 results in a decrease in the forecast need for sand and gravel during the Plan period to 2038. This is partly due to some of the allocated sites having received planning permission in 2021. However, the remaining allocated sites without planning permission in the NM&WLP contain sufficient resources to meet the remaining forecast need for sand and gravel during the Plan period.

Carstone

Using the most recent published data from 31.12.2022 results in only a very small change in the forecast need for Carstone during the Plan period to 2038 and the one allocated site will therefore continue to be appropriate to allocate to meet any additional need for Carstone during the Plan period.

Silica Sand

Using the most recent published permitted reserve data from 31.12.2022 results in a decrease in the forecast need for silica sand during the Plan period to 2038. The allocated sites have both received planning permission, however, they do not contain sufficient permitted reserves to meet the forecast need and therefore criteria-based policy MPSS1 will be used to determine planning applications for silica sand extraction on unallocated sites.