

Greater Essex LAA 2023

(Published 2025)

Executive Summary

This Local Aggregate Assessment (LAA) has been produced on behalf of the Greater Essex authorities¹, reflecting the position at the end of 2023. The annual Aggregate Survey is the source of primary data for all sales and reserves information. This year, this survey was administered at a national level by the British Geological Survey (BGS) and undertaken during from March 2024, with the most up to date results provided by BGS the Minerals Planning Authority on the 6th November 2024. As of publishing (May 2025) these are yet to be confirmed as final results. During this time, 96.4% of sites provided a response.

2023 Headline Figures

	Performance in 2023	Comparison with 2022
Land-won sand and gravel sales (Million tonnes (Mt))	3.04Mt (¥ 10.54%)	3.40Mt
Potential maximum production capacity at sand and gravel extraction facilities (Mtpa) (2023 Response Rate = 96.4%)	Not collected in the National Survey	3.12Mtpa
Permitted reserves of sand and gravel at end of year (Mt) at existing quarries (including planning permission granted in 2023)	35.07Mt (Ψ 12.02%)	39.87Mt²
Landbank based on apportionment (years)	7.88 years (¥ 12.02%)	8.35 years
Ten-year rolling annual average sales (Mt) (Ten-year period 2014 – 2023)	3.44Mt (♥ 0.41%)	3.45Mt
Landbank based on ten-year rolling average sales (years)	10.19 years (♥ 11.66%)	10.75 years
Three-year rolling average sales (Mt) (Three-year period 2021 – 2023)	3.36Mt (↑ 0.80%)	3.33Mt

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¹ Essex County Council, Southend-on-Sea Borough Council and Thurrock Council.

² This value has been recalculated since its presentation in the previous Greater Essex LAA, due to all existing aggregate recycling data being reanalysed to accord with the Guidance update in January 2024.

	Performance in 2023	Comparison with 2022
Sales from Wharf transhipment sites (Hard rock)	1.49Mt	1.92Mt
Sales from Wharf transhipment sites (Sand & Gravel)	3.22Mt	Unable to disclose due to commercial confidentiality
Potential maximum throughput at transhipment facilities (Mtpa) (2023 Response Rate = 0%)	Not collected in the Annual Survey	2.77Mt
Recycled Aggregate Sales (Mt) (2024 reviewed methodology including a 20% uplift on raw WDI data, as suggested in the guidance)	0.96Mt (▼ 10.9%)	1.07Mt ³
Potential Maximum Annual Aggregate Recovery Throughput (Mtpa) at facilities co-located at minerals extraction and/or transhipment sites (2023 Response Rate = 0%)	Not collected in the National Survey	0.97Mtpa

Source: Essex County Council (2024).

Summary of Key Issues

Extraction & Processing Facilities within Greater Essex

There were 32 sand and gravel quarries in Greater Essex, 17 of which were active, of the inactive sand and gravel quarries, four are 'dormant'⁴, as of 31 December 2023. At this time, the potential for extraction at a further five sites (with a potential reserve of 4.64Mt) were pending determination and/or Legal Agreements. This would provide a resultant uplift in landbank presented in the table above.

There are no hard-rock quarries, but one quarry produces silica sand. Greater Essex also has two brick clay quarries and a single chalk quarry, but these are not reported on through the LAA as they are not classed as aggregates.

There were 57 processing facilities that add value to mineral products co-located with mineral and transhipment facilities, as of 31 December 2023.

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³ This value has been recalculated since its presentation in the previous Greater Essex LAA, due to all existing aggregate recycling data being reanalysed to accord with the Guidance update in January 2024.

⁴ Sites can be classified as 'Dormant' under the terms of the Planning & Compensation Act 1991 and the Environment Act 1995. Dormant sites cannot be worked until new schemes of conditions have been determined and, therefore, are omitted from the landbank and permitted preserve calculations.

At the end of 2023, Greater Essex had sufficient permitted reserve and allocations to satisfy the sand and gravel landbank minimum requirement of seven years when considering both the apportionment (7.87.88 years) and the ten-year rolling sales method of calculation (10.19 years). This information is developed from draft and unratified BGS data, and so may need to be reviewed once the National data is finalised. There were also 4.64 Million tonnes (Mt) of pending reserves, as of 31 December 2023, awaiting determination through the Development Management system, which would further increase the landbank. These are revised figures compared to those presented in the Replacement Essex Minerals Local Plan review 2025 to 2040, as they were based on the most up to date, but unratified data. The resulting changes will be taken into account at the same time as all other comments received during the consultation period.

Marine-Won Sand and Gravel

Mineral landed in Greater Essex is sourced from the Thames and East Coast dredging regions. There is, however, no requirement for wharves to record the sales destination so it is not known how much is used in Greater Essex or subsequently sold elsewhere. A total of 4.94Mt of material was removed from the seabed from these areas in 2023. This is a decrease of 0.36Mt compared to the 5.29Mt removed in 2022. Licenses have been granted that permit the extraction of a total of 11.48Mt per annum from the Thames and East Coast regions combined. At this rate, current estimates suggest that there are 22 years of primary marine aggregate permitted for extraction in the Thames Estuary, whilst concurrently there is 9 years aggregate permitted for extraction within the East Coast region.

The Marine Plan covering this area of sea is the Southeast Marine Plan, adopted in June 2021. The Marine Management Organisation (MMO) held a formal consultation between 15 January 2024 and 12 February 2024, to start the process of replacing the East Marine Plans, as agreed by the Secretary of State in April 2023.

It is not considered appropriate to reduce land-won reserves based on the assumption that they will be replaced by an expansion in the landing of marine-won reserves and/or increases in recycled/ secondary aggregate production, particularly as in the case of the latter, the Mineral Products Association state that greater efficiencies are unlikely to be realised. With regards to the former, Mineral Planning Authorities have no jurisdiction in the marine environment and so have little ability to influence the amount of marine-won mineral that could be dredged. The small number and constrained location of landing facilities in Greater Essex exacerbates this.

Importation and Exportation of mineral

Across Greater Essex, as at 31 December 2023, there were five active wharves, an inactive wharf and a further 'potential' wharf⁵. In addition, there were four active rail depots, and a further two inactive rail depots⁶. The National Aggregate survey 2019, provides the most robust data regarding importation and exportation, as in many cases in more recent local

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⁵ Parkeston Quay (East) in Harwich has been identified as potentially providing a large new aggregate import in the form of a marine wharf, although this proposal has, to date, not materialised. As specified in the Essex MLP (2014, pg. 72)

⁶ This consists of both rail and wharf transhipment facilities.

Executive Summary

surveys not enough operators responded to allow for figures to be published whilst maintaining commercial confidentiality.

Of the total hard rock and sand and gravel sold from wharves in Greater Essex (4.70Mt), 73% of the sand and gravel, and 23% of the hard rock was destined for Greater Essex. This information is developed from draft and unratified BGS data, and so may need to be reviewed once the National data is finalised.

The Mineral Planning Authorities will also continue to ensure that existing wharf and rail transhipment facilities are safeguarded from incompatible development to ensure their continued operation.

Secondary Aggregate & Recycling

Supporting evidence to the Essex and Southend-on-Sea Waste Local Plan 2017 (WLP)⁷ stated that it is not known whether secondary aggregates are produced in any significant quantity in the joint Essex and Southend-on-Sea Plan area. It also considered that the lack of heavy industry suggests there will be little.

Using the WDI standard methodology as updated in Jan 2024, it has been established that in 2023 there were 79 active aggregate recovery facilities in Greater Essex, which produced an estimated 0.96Mt of recycled aggregate product, which includes the 20% uplift as advocated in the guidance for mobile plant etc. This is a fewer number of facilities, producing less recycled aggregate than in 2022. It is also noted that a concentration of this type of facility is in the southern part of Greater Essex.

The Mineral Planning Authorities will continue to safeguard aggregate recovery and secondary processing facilities from incompatible development to ensure their continued operation, thus maintaining this source of aggregate for the market.

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⁷ ECC/BPP (December 2015) SD 20 - Topic Paper 1 - Waste Capacity Gap Update

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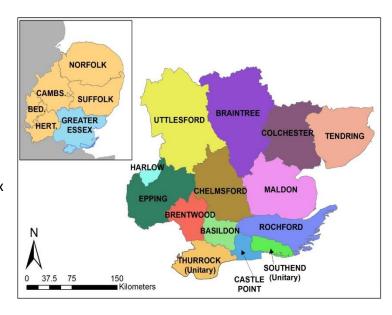
1. Introduction

1.1. Background

1.1.1. Mineral Planning Authorities (MPAs) are required⁸ to produce a Local Aggregate Assessment (LAA) annually to ensure a steady and adequate supply of aggregates. This LAA reports on the Greater Essex⁹ position on 31 December 2023. The Plan Area pursuant to the Essex Minerals Local Plan (2014) covers the administrative area of Essex only.

Southend-on-Sea and Thurrock have their own Local Plans relevant to their own administrative areas.

1.1.2. Greater Essex is in the
East of England,
bordering Kent and four
London Boroughs¹⁰. Essex
is a two-tier
administrative system¹¹,
whilst Southend-on-Sea
and Thurrock are unitary
authorities who operate
separately.



1.2. Summary of Key Planned Infrastructure Projects

1.2.1. The demand for mineral resources¹² is predicated on the amount and type of development in and close to Greater Essex. Whilst the rolling 10-year average sales data (discussed in detail in the next sections) provides a basis for providing a steady and adequate supply of mineral, the National Planning Policy Guidance (NPPG) indicates that a LAA could also use other relevant local information upon which to base mineral provision. Due to the proximity to London and other local factors, there is expected to be significant housing growth and major construction projects.

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⁸ Required by the National Planning Policy Framework (NPPF, 2024, para 226, a) The Planning Practice Guidance now provides that the LAA should contain three elements, which inter-alia include a forecast of the demand for aggregates, an analysis of all aggregate supply options, and an assessment of the balance between demand and supply, and the economic and environmental opportunities and constraints that might influence the situation. It should conclude if there is a shortage or a surplus of supply and, if the former, how this is being addressed.

⁹ Greater Essex is formed of the Authorities of Essex, Southend-on-Sea, and Thurrock. These are amalgamated in statistical/data collection activities to protect commercial confidentiality.

¹⁰ Enfield, Waltham Forest, Redbridge, and Havering.

¹¹ The Essex administrative area is formed of the County Council and 12 Local Councils.

¹² Including the generation and use of recycled/secondary aggregates

Housing Delivery

- 1.2.2. As of April 2023, it was expected that local authorities in Greater Essex were preparing local plans to deliver approximately 195,000 additional homes up to 2033 and beyond, of which 48,000 have been completed, a further 48,000 have the benefit of planning permission and 98,000 remain to secure planning permission.
- 1.2.3. However, in Labour's manifesto, there was a pledge to build 1.5 million new homes over the next Parliament. To make this possible, Secretary of State for Housing, Communities and Local Government announced 13, that changes to the NPPF (with a resulting a new method for calculating housing need¹⁴) will result in the nation's new mandatory housing target, with all local authorities having an obligation to increase delivery. Provision of the National Governments housing requirements is being developed by Local Planning Authorities and will be set out in emerging Local Plans, which will be taken into account through the Minerals Local Plan review. To determine the minimum number of homes needed, new and/or review Local Plans in Greater Essex covering the period to 2040 and beyond are being informed by a local housing need assessment, conducted using the mandatory standard method in NPPF (2024). This is resulting in an increase of 37% in the local housing need targets, from 10,316 to 14,089 homes per annum. Whilst this rate of housebuilding is ambitious, and significantly above a high of c 8,200 homes delivered in 2018/19, the MLP cannot be a barrier in the attainment of these targets.
- 1.2.4. Local Plans in Basildon, Castle Point, Chelmsford, Maldon, Rochford, Uttlesford, Southend and Thurrock are at early stages of preparation to go beyond 2040. Epping Forest Local Plan was adopted in March 2023, whilst Brentwood, although adopting a new Local Plan in March 2022, is committed to submission of a review for examination within 28 months of adoption.
- 1.2.5. Based on the current positions specified in extant and emerging Local Plans, a significant proportion of growth will continue to be provided at the key centres of Basildon, Chelmsford, Colchester and Harlow through extant planning permissions and new site allocations, including many new sustainable urban extensions. The four new Garden Communities in adopted Local Plans are also located adjacent to or in close proximity to these key centres. Specific details on housing numbers are presented in Appendix I.
- 1.2.6. Below is a map which shows all of the major housing schemes in Greater Essex that consist of residential/mixed residential of more than 200 dwellings along with supporting infrastructure, which are within the scope of the planning process (speculative, allocated, in determination and/or under-construction). It can be seen

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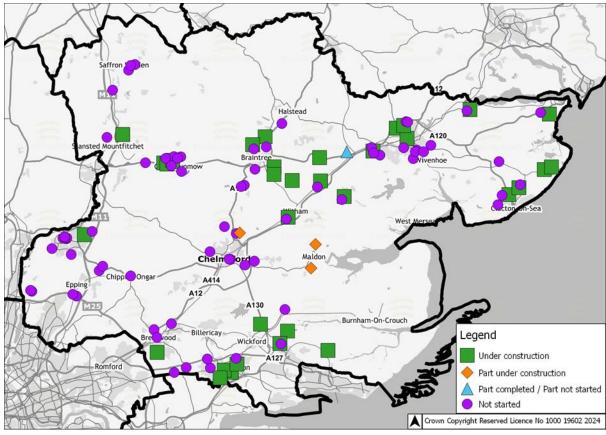
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¹³ Rayner, 30 July 2024

¹⁴ A major change in the draft NPPF were the revisions to the standard method for calculating housing need. The methodology will move from a long-established population-based model (based on 2014 population data) to a stock-based model, where the baseline figure will be 0.8 per cent of the dwellings within the local authority. This would incorporate an uplift where house prices are "most out of step with incomes".

that the majority of the large housing schemes are clustered around the key growth locations and existing major developments.

Figure 1: Major Housing Construction Projects, Planned, Programmed or Underway (31 December 2023)



Source: Essex County Council (2024)

Notes: The locations marked as not started, consist of those that have planning permission, allocated in local plans and/or have been submitted as sites to be assessed for the potential to allocate in emerging local plans.

1.2.7. The graph below identifies the correlation between the number of houses built in any year and the amount of aggregate sold. There are some anomalous years such as the housing numbers in 2020 (where data was not gathered due to COVID-19), but overall, it can be assumed that the housing demand is a key driver to the need for aggregate.

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4.0 20,000 3.40 3.56 3.17 2.96 **Housing Completions** 18,000 3.5 Sand & Gravel Sales (Millions of Tonnes) 3.64 3.04 16,000 3.0 14,000 2.5 12,000 10,000 2.0 7,483 6,836 5,725 8,000 1.5 6,000 1.0 4.000 2.738 0.5 2,000 0.0 2019 2023 2018 2022 2021 Year (Position at the 31st December) -Actual Land-won Aggregate Sales (Mt) Annual Builds (Greater Essex) (Greater Essex)

Figure 2: House builds vs Aggregate Sales in Greater Essex (2018 to 2023)

Source: Essex County Council (2024)

Major Construction Projects

1.2.8. In addition to this housing growth, there will be supporting growth in the commercial sector as well as major developments/construction projects ¹⁵ that are either planned, programmed or underway in Greater Essex and/or in adjoining authorities during 2023. These would have a significant mineral demand either individually or cumulatively. The major construction projects are identified in the figure below, with additional details set out in Table A22 presented in Appendix I.

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¹⁵ For the purposes of the Survey and this report, these are 'unusually large individual development projects', which are anticipated to have greater than local influence on aggregate demand. This could include Nationally Significant Infrastructure Projects (NSIPs), residential/mixed residential schemes more than 200 dwellings along with supporting infrastructure, and significant new transport infrastructure.

A11

A12

A12

A13

A13

Legend

Planning Application

NSIP

Linear NSIP

Colour codes

Completed

Granted Permission

Programmed

Crown Copyright Reserved Licence No 1000 19602 2024

Figure 3: Major Infrastructure Construction Projects, Planned, Programmed or Underway (31 December 2023)

Source: Essex County Council (2024)

1.2.9. It is noted within the East of England Aggregates Working Party, Annual Monitoring Report: 2023 Data (2025) notes that from "the data available in the East of England, it can be established that there are still a number of large-scale schemes in the pipeline that will require significant quantities of aggregates. However, it is not currently possible to establish the likely total demand for minerals required for these large scale projects, either from a lack of estimate of demand from those within the region, or in the absence of a comprehensive list of projects outside the region." It is often the case that major infrastructure schemes as well as major housing schemes do not explicitly state the amounts of aggregate that are likely to be required within schemes, and due to market forces at the time of construction may influence where aggregate is acquired from. This provides Mineral Planning Authorities difficulties in forecasting future demand with reasonable certainty.

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¹⁶ East of England Aggregates Working Party Annual Monitoring Report: 2023 Data (2025) page 10

2. At A Glance: Minerals in Greater Essex

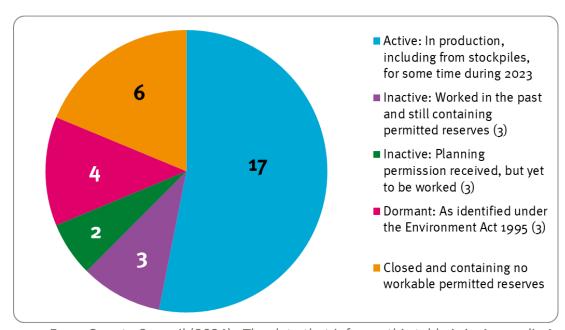
2.1. Geology

- 2.1.1. Geology dictates where viable mineral resources occur and consequently where extraction can take place. The predominant economic mineral is sand and gravel, but Greater Essex also contains silica sand, brick clay, brickearth and chalk. Silica sand, brick clay, brickearth and chalk are not classed as aggregates and are therefore not required to be reported on though the Local Aggregate Assessment (LAA). These non-aggregates are extracted at four sites across Greater Essex.
- 2.1.2. There are no hard rock deposits within Greater Essex and therefore demand for this aggregate is supplied via the importation of material, which is reported in a later chapter.

2.2. Primary Land-won Aggregate Facilities

2.2.1. Figure 4, below identifies the status of the 32 sand and gravel extraction sites in Greater Essex as of 31 December 2023¹⁷. The map below identifies the spatial location of these facilities.

Figure 4: Sand and Gravel Quarry Status in Greater Essex (As Of 31 December 2023)



Source: Essex County Council (2024). The data that informs this table is in Appendix A

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¹⁷ As listed within Appendix A.

2.2.2. Within the nation aggregate survey this year, there was no question regarding the maximum potential sand and gravel production capacity¹⁸, as of 31 December 2023. This is unfortunate as although the response rate has been low since this question was included in regional aggregate surveys, it had started to provide some insight to production capacity.

2.3. **Transhipment Facilities**

2.3.1. Transhipment facilities allow mineral movement over long distances, typically rail or water based. Mineral can be sold and distributed from these sites. The status of transhipment facilities in Greater Essex is shown below in Figure 5 and the spatial distribution of these is shown in the map below. There are a total of 13 transhipment sites in Greater Essex, of which nine were active in 2023.

Active permitted Wharves 2 Closed wharf Inactive potential wharf Active Permitted Rail Depots* 1 Inctive Permitted Rail

Figure 5: Transhipment Facility Status in Greater Essex (As Of 31 December 2023)

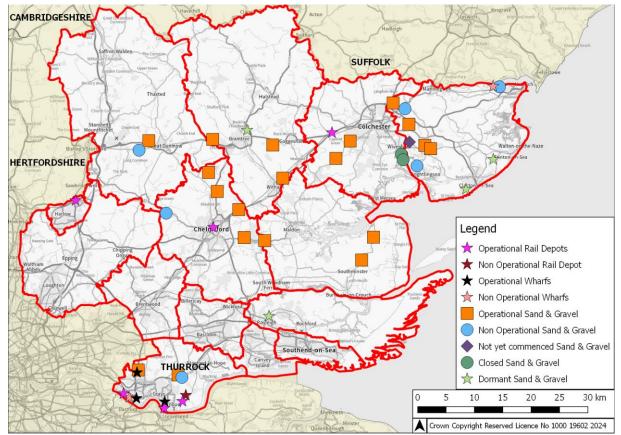
Note*: The rail Transhipment sites were not surveyed in the BGS aggregate survey, due to the potential double counting of material, but this is understood to be their status. Essex County Council (2024). The data that informs this table is in Appendix B.

Depots*

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¹⁸ Taking account of plant capabilities and planning restrictions



Map 2: Mineral Extraction & Transhipment Sites in Greater Essex (31 December 2023)

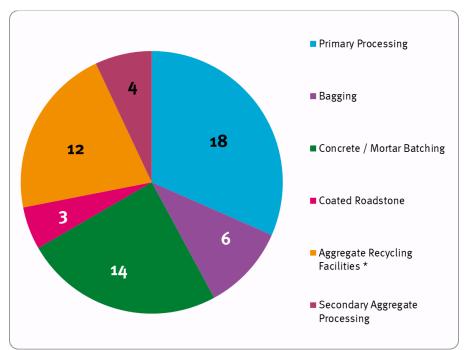
Source: Essex County Council (2024). The data that informs this table is in Appendix A and Appendix B.

2.4. Processing Plants

- 2.4.1. Processing allows for a greater range of products to be produced on-site, contributing to the economic viability of mineral developments, and reducing "mineral miles". Primary processing produces a higher quality final product and allows more sustainable use of aggregate. Secondary processing differs from primary, as it makes a higher value final product through manufacturing of the original material.
- 2.4.2. In total, there have been 57 processing facilities with planning permission that add value to the aggregate product, which are co-located with extraction and/or transhipment facilities. The figure below identifies types of processing facilities in Greater Essex and the subsequent map identifies the spatial distribution of processing facilities where they are co-located with primary extraction and transhipment sites.

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Figure 6: Processing Plant at Mineral Extraction/Transhipment Sites in Greater Essex (31 December 2023)

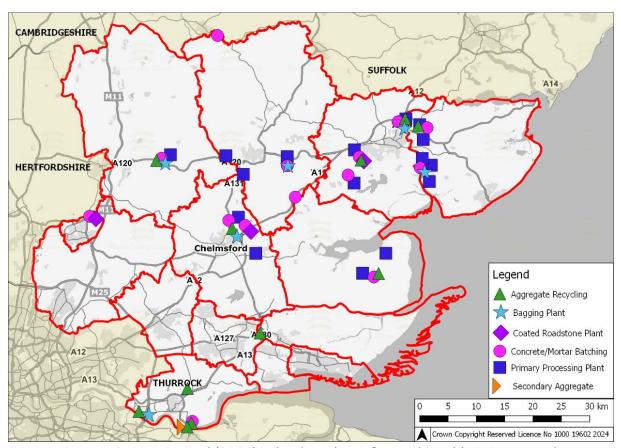


Note: This number of aggregate recycling facilities ONLY relates to those that are co-located on extraction and/or transhipment sites. Full details on all Aggregate Recycling Facilities within Greater Essex that 'produce' recycled aggregate are discussed in the Secondary & Recycled Aggregate section of this document.

Source: Essex County Council (2024). The data that informs this table is in Appendix D.

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Map 3: Primary & Secondary Aggregate Processing Facilities Co-Located with Extraction and/or Transhipment Facilities in Greater Essex (31 December 2023)



Source: Essex County Council (2024). The data that informs this table is in Appendix A.

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3. Land-Won Sand & Gravel

3.1. Introduction

- 3.1.1. The NPPF (2024)¹⁹ requires that Mineral Planning Authorities (MPAs) plan for a steady and adequate supply of sand and gravel by maintaining a landbank of at least seven years²⁰. Within Greater Essex the primary method of calculating the sand and gravel landbank is via the annualised apportionment²¹ of 4.45Mtpa.
- 3.1.2. Further, the NPPF (2024) states that mineral provision should be based (*inter-alia*) on a rolling average of ten years' sales data and other relevant local information, including any extant guidelines. This is 'sense checked' through an average of the last three-years of sales, as advocated by the PPG. This LAAs ten-year rolling average sales is calculated from 2014 to 2023. Henceforth, any reference to ten-year rolling average sales is describing this time-period.
- 3.1.3. Both calculation methods described in paragraphs 3.1.1 and 3.1.2, above are presented in this chapter, to ensure complete and appropriate assessment.

The Essex MLP Review

- 3.1.4. At present, the Essex Mineral Local Plan is being reviewed, with consideration is being given to revising the annualised plan provision and consequently the baseline figure from which a landbank is calculated. This is in part due to the expiration of the National and sub-national guidelines upon which the current provision rate was based.
- 3.1.5. At the most recent public engagement (Regulation 18: 6th February and 9th April 2024), it collated all information and updates to date. It continued to propose to adopt an annual plan provision based on the average ten-year rolling sales, in accordance with the NPPF (2024) methodology, with an additional 20% buffer to offer a measure of flexibility as is also set out in the NPPF (2024). This took in to account relevant local factors, such as sales reducing over the pandemic period, which acted to artificially depress the ten--year average, and the increased rate of future development as set out in district local plans. With the decision subsequently taken to re-base the MLP to 2040, a revised mineral provision figure will be calculated and published for public consultation in due course.
- 3.1.6. The consultation documentation also included initial assessment of all sites proposed by landowners/operators during the two calls for sites in February/March 2022 and September 2022. Greater Essex, and adjoining Authority Areas, are

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¹⁹ NPPF (2024) Paragraph 226, a.

²⁰ Landbanks for seven years are required for sand and gravel (NPPF (2024) Paragraph 226, f). The landbank is determined by comparing the permitted reserve and the estimate of the demand of mineral per annum.
²¹ As adopted through policy, which was based on the "National and Sub-national Guidelines for Aggregates

Provision in England", (2005 – 2020)

- expected to experience significant growth, in terms of both housing and major infrastructure projects. The forecast of demand and any potential uplift from the average ten-year rolling sales will continue to be monitored and reviewed, with adjustments made (if necessary) during the MLP review process.
- 3.1.7. As a Unitary Authority, Thurrock Council is responsible for its own Local Plan and therefore any changes to the approach in Essex does not impact the approach taken in Thurrock to mineral provision. Their plan provision figure will remain at 0.14mtpa until such a time as Thurrock Council adopt an alternative figure. With the future of devolution and local government reorganisation in Greater Essex unclear at the time of publication, the status of these separate mineral plan documents will continue to be monitored.

Source of Data

- 3.1.8. The source of primary data in this chapter is the National Aggregate Survey 2023 for Greater Essex, undertaken in early 2024. For this LAA, the most up to date results provided by BGS to the Minerals Planning Authority have been used. As of writing (May 2025) these are yet to be confirmed as final result. In total, 96.4% of sites provided a response. Data is collected at this sub-regional level, rather than on an authority basis, as this provides the most accurate information available, at the lowest reporting level at which commercial confidentiality can be maintained. As with all surveys, there are limitations which could lead to inaccuracies, such as:
 - Operator(s) may not provide information on site(s) within their control for various reasons;
 - Accidental errors on the form, not able to be detected by the MPA.
- 3.1.9. It should be noted that where there are fewer than three separate operators who returned survey data, this collated data cannot be published, even if those operators provide returns for multiple sites. Further, the MWPA is required to destroy all individual site survey responses annually once individual returns have been collated for monitoring purposes. As such, where information cannot be reported due to insufficient data returns to protect commercial confidentiality in any given year, there will be no figure retained that can be used for planning purposes in the future, even for internal purposes.
- 3.1.10. It cannot be subsequently inferred that any combined figures presented represent 0% of their true value as production rates vary significantly across sites. It would not be appropriate to speculate on those values which may have been derived from those sites where survey information was not returned. As such, any trend analysis factoring in the latest data must be treated with caution.

3.2. Sand & Gravel Permitted Reserves in Greater Essex

3.2.1. Due to the identified anomaly between the MLP review data (presented in the Reg 18 consultation documents) and the LAA data (which also impacted the figures

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provided to the EoEAWP), the 2022 figures have been re-calculated from the survey responses and new reserve granted in planning permissions. This has consequently affected the 2022 landbank figures. All figures presented in this document have been reviewed are considered to be the correct.

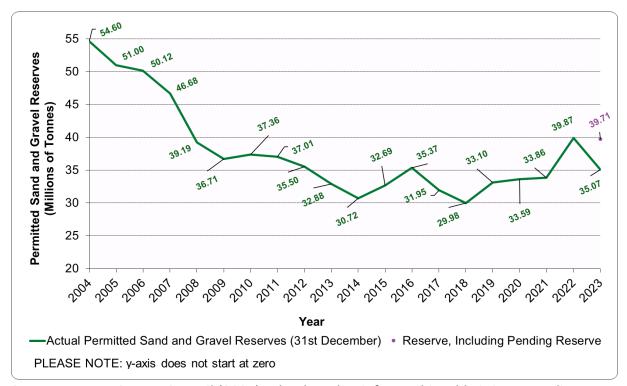


Figure 7: Permitted Sand & Gravel Reserves in Greater Essex (2004 to 2023, 20 years)

Source: Essex County Council (2024). The data that informs this table is in Appendix E.

Note 1 2019 data collection impacted by furlough due to COVID-19 and therefore sales are potentially under-reported.

- 3.2.2. There has been a clear reduction in the amount of mineral permitted for extraction in Greater Essex over the last 20 years. Actual permitted reserves were 54.60 million tonnes (Mt) in 2004, but at the end of 2023 stood at 35.07Mt²².
- 3.2.3. Without prejudice to any planning decision, the graph above also identifies the amount of reserve that would be added to the permitted reserve should permission be granted for all those applications which were pending determination and/or legal agreements as of 31st December 2023. This "pending reserve" is 4.64Mt across both Essex and Thurrock Mineral Planning Areas for all types of sand and gravel extraction. If this 4.64Mt was added to the actual permitted reserve (as stated above: 35.07Mt) by way of planning approval, the permitted reserve would increase to 39.71Mt.

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²² This is a revised figure compared to the one presented in the Replacement Essex Minerals Local Plan review 2025 to 2040, as that was based on the most up to date, but unratified data. The resulting changes will be taken into account at the same time as all other comments received during the consultation period.

- 3.2.4. Notwithstanding the potential reserve increase set out above, the overall 20-year reduction in current permitted reserves is the result of the rate of sales being higher than the rate of material being added to the reserve through planning permissions. This local reduction follows a national trend and is not considered to be a significant local planning issue at this time as the sand and gravel landbank remains above the minimum seven years, particularly as the 14-year period from 2009 has remained fairly stable and when considering the potential pending reserve highlighted above.
- 3.2.5. The East of England Aggregate Working Party (EoE AWP) Monitoring Report²³ notes that in 2023, Greater Essex held 29% (a decrease from the 33% in 2022) of the permitted reserves held in the area covered by the EoE AWP. This is the largest proportion of reserves within the EoEAWP Area. Reporting on the East of England as a whole, this report also states inter-alia that it is "important to consider the context of continued sales against the backdrop of a general downward trend in reserves" and that this "position is clearly unsustainable in the long run. Caution should, therefore, continue to be exercised when assessing the position against 10-year sales figures and individual mineral planning authorities are encouraged to give careful consideration to their annual aggregate provision rates when preparing their Local Aggregate Assessments and particularly when reviewing their development plans"²⁴.
- 3.2.6. During 2023, 33 applications relating to mineral extraction, processing or recycling were either determined or were in the determination process, of which:
 - Nine planning applications were granted, of which there were none that boosted the permitted reserve. Of those granted, one was for aggregate recycling (providing a retrospective 12,000 tonnes recycling capacity), two were for operational changes to sites (including extensions of time of working) and the remaining six were for changes to processing facilities;
 - 23 planning applications were pending determination and/or pending subject to the signing of legal agreements, of which:
 - Five applications include proposals for increasing the permitted reserve by a total of 4.64Mt:
 - Colemans Farm Quarry (ESS/36/21/BTE, lateral extension) with a proposed reserve of 0.27Mt (Essex CC);
 - Lufkins Farm (ESS/101/21/TEN, lateral extension) with a proposed reserve of 1.07Mt (Essex CC);
 - Martells Quarry (ESS/29/20/TEN, lateral extension) with a proposed reserve of 1.31Mt, of which 0.72Mt would consist of Silica Sand and 0.58Mt would consist of sand and gravel (Essex CC);

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²³ EoEAWP (2025) Annual Report 2023 Data, page 40, paragraph 4.7.

²⁴ EoEAWP (2025) Annual Report 2023 Data, page 69, paragraph 4.46.

- Land at Stanway Quarry and East of Colchester Zoo (ESS/34/23/COL)
 with a proposed reserve of 05Mt (Essex CC)
- Orsett Quarry & Walton Hall Farm (19/01709/FUL, a lateral extension)
 with a proposed reserve of 1.5Mt (Thurrock).
- Two applications include proposals for increasing aggregate recycling capacity by 0.16Mt:
 - Colchester Quarry (ESS/31/22/COL) with proposed capacity of 0.08Mt;
 and
 - Arnolds Farm (ESS/118/22/EPF) with proposed capacity of 0.075Mt.
- o The remaining applications pending determination and/or pending subject to the signing of legal agreements were for Extensions of Time, changes to restoration schemes and provision of additional processing facilities.
- A single retrospective application was refused. This was an unauthorised inert waste processing facility at Boro Farm (ESS/109/22/UTT)²⁵ and would have provided 0.08Mt recycled aggregate capacity; and
- There were no applications withdrawn from the planning process by the applicant. This would have had no impact on the permitted reserve or recycled aggregate capacity.

3.3. Sales of Sand & Gravel

Comparison of National and Regional 2019 Data

3.3.1. As discussed in the previous LAA²⁶, a national level survey titled 'Aggregate minerals survey for England and Wales, 2019' for the year 2019 was undertaken during 2020, with the results being published in mid-2021. As this information was collated after the annual regional aggregate survey covering the same period, a data comparison of both surveys at Greater Essex level was undertaken. This comparison identified a discrepancy and concluded that the larger sales value of 3.17Mt²⁷ (obtained via the Regional Survey returns coordinated by the East of England Aggregates Working Party) should be used for continued internal assessment now and in the future rather than the survey conducted at the national level. This was because the regional survey was informed by a greater number of survey returns, although this survey should still be acknowledged as an under-representation of the annual sales in that year as the regional survey was also not informed by a 100% survey return.

Table 1: Impact of Different Survey Results in 2019 on 2023 10-year and 3-year Averages

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²⁵ This application has subsequently been appealed by the applicant. The appeal was dismissed and EN upheld. The appeal decision was 27/08/2024.

²⁶ The Greater Essex LAA (Covering the year 2020), published in 2021.

²⁷ Compares to 2.94Mt sales information collated via the National 2019 aggregate survey.

2010 Survey	Collated Total Sales	Impact on	
2019 Survey	(Mt)	10-yr Average Sales (Mt)	3-yr Average Sales (Mt)
National Survey Sales Result	2.94	3.42	3.36
Regional Survey Sales Result	3.17	3.44	3.36

Source: Essex County Council (2025)

3.3.2. It should be noted that the East of England Aggregate Working Party (EoE AWP) Monitoring Report is obliged to use the national aggregate survey value of 2.94Mt sales in 2020 for reporting at regional level²⁸. At this value, as is noted within the draft EoEAWP AMR, Greater Essex contributed 29% (a decrease on the 30% in 2022) of the East of England sales²⁹.

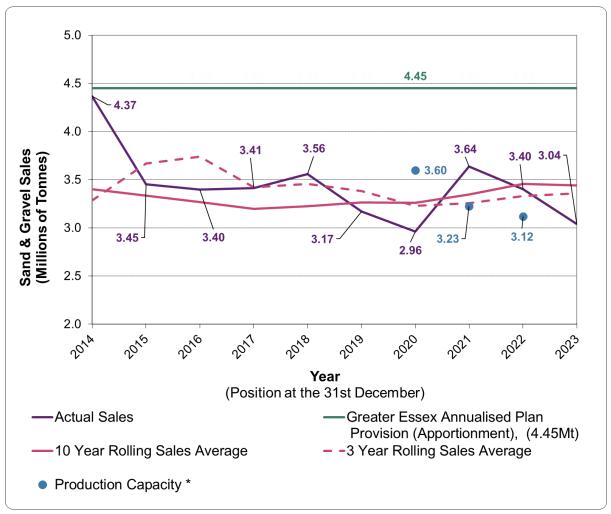
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²⁸ The East of England Authority Monitoring Report, produced at the regional output level will continue to use the Greater Essex 2019 reserves figure, but will use the BGS (National) sales figure to ensure consistency within the table contained therein, and to allow a consistent representation across the region.

²⁹ EoEAWP (2025) Annual Monitoring Report 2023 Data, page 41, paragraph 4.19.

Greater Essex Sales (2014 to 2023)

Figure 8: Greater Essex Sales of Land Won Sand & Gravel (2014 to 2023, 10 years)



Note*: The production capacity presented in this graph shows the total amount of estimated production capacity at sites in Essex, provided by operators via the survey. The lower response rate of this specific metric in the survey results in a lower production capacity than the actual annual sales. Furthermore, this metric was not collected in the 2024 National Survey and therefore we have no data for the year 2023.

Source: Annual collated Aggregate Survey data, correct as of 31st December annually.

Note 1 2019/2020 data collection impacted by furlough due to COVID-19 and therefore sales are potentially under-reported.

Note 2: Y axis not at zero. The data that informs this table is in Appendix F.

3.3.3. Sales have fluctuated during the preceding ten years, with sales in 2014 recorded as 4.37Mt, which is the peak level of sales for the period, just 2% below the annual apportionment. Although fluctuating, sales have reduced to 3.04Mt in 2023, which is only slightly higher than the sales in 2020 (2.96Mt, that was impacted by the COVID-19 pandemic). This reduction would be at odds with the scale of major

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- development and housebuilding planned and programmed within Greater Essex and beyond, including within section 1.2 Summary of Key Planned Infrastructure Projects, and will need to be closely monitored in the future.
- 3.3.4. Unfortunately, during this national survey estimated production capacity at individual sites was not required. As such it has not been identified on the above graph for 2023.
- 3.3.5. As previously set out in paragraph 3.3.1, it is considered that the value presented for 2019 (3.17Mt) should be considered as an under-representation of sales in that year, as due to the impacts of the pandemic some operators responded to the local survey and not the national, and vice versa.
- 3.3.6. Nevertheless, it is a requirement for the LAA to report on the ten-year rolling average sales. The PPG also requires an assessment of the last three years of rolling average sales to help establish any trend in sales. It should be noted that all the average sales information will be impacted by the reduction in survey returns covering sales in 2019 (data collection issues) and 2020 (actual lower sales due to the impacts of the pandemic), which would depress the overall averages.
- 3.3.7. When comparing these 2023 sales (3.04Mt, as noted above), the current level of sales is below both the ten and three year sales average. For reference, the twenty-year sales average (2004 to 2023) is 3.42Mt. The ten-year rolling average sales figure for this period (2014 to 2023) is 3.44Mt, which is an reduction of 0.41% recorded over the previously reported ten-year period (2013 to 2022). The three-year average sales figure (2021 to 2023) stands at 3.36Mt, which is an increase (0.80%) on the figure presented last year.
- 3.3.8. The annualised plan provision apportionment value is 22.7% higher than the 2014 to 2023 ten-year rolling sales average value, with sales not exceeding the apportionment value across the period assessed. It is noted that the current ten-year rolling average sales figure includes the impacts of the COVID-19 pandemic. The sales in 2023 were 11.6% below the ten-year rolling average sales figure (2014 2023) of 3.44Mt.
- 3.3.9. The East of England AWP Monitoring Report 2023³⁰ states inter-alia that "it is important to consider the context of continued sales against the backdrop of a general downward trend in reserves" and that this "position is clearly unsustainable in the long run. Caution should, therefore, continue to be exercised when assessing the position against 10-year sales figures and individual mineral planning authorities are encouraged to give careful consideration to their annual aggregate provision rates when preparing their Local Aggregate Assessments and particularly when reviewing their development plans". Whilst the current Essex MLP sand and gravel provision rate has consistently been above recorded sales, the Essex Minerals and

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³⁰ EoEAWP (2025) Annual Report, page 29, paragraph 4.8, as mentioned in para 3.2.5 of this report.

Waste Planning Authority also recognises that basing mineral provision strictly on a ten-year rolling sales average when that average is notably depressed due to impacts on the economy and where current sales clearly outstrip that average, would contribute to the overall issue of a downward trend in reserves. An appropriate plan provision figure is being considered through the current MLP Review. At the regulation 18 consultation stage (Feb 2024) the Essex MPA consulted upon a 10-year rolling average sales plus 20%, to acknowledge the concerns raised via the EoEAWP.

3.3.10. When considering the three-year rolling average sales, it can be seen in Figure 8, that in 2023, this increased to 3.36Mt from 3.33 in 2022. As the 10-years average rolling sales data remains higher than the three-years average rolling sales data, this indicates the sales values in the earlier years were higher than those more recently and could imply a downward trend overtime. This should continue to be monitored.

3.4. Sand & Gravel Landbank

- 3.4.1. The Planning Practice Guidance³¹ states inter-alia that aggregate landbanks, are principally a monitoring tool to provide MPAs an early warning of possible disruption to the provision of an adequate and steady supply of land-won aggregates. Landbanks should be used principally as a trigger for review the current provision of aggregates i.e. to consider whether to conduct a review of the allocation of sites in the plan.
- 3.4.2. Landbanks are calculated annually by dividing permitted reserve by the annual amount of mineral to be extracted; and are reported in years. The reported value is the time the landbank will last before it is exhausted if no further mineral is permitted for extraction. Permitted reserves will be increased by the grant of planning permissions, whilst sales will erode the permitted reserve. In calculating landbanks, the term 'permitted reserve' includes current non-working sites but excludes those sites where mineral working cannot take place until there has been a review of the planning conditions attached to the relevant planning permission ³².
- 3.4.3. During 2023, no planning applications were granted within Greater Essex, which generated no additional sand and gravel reserve (as described in section 3.2.6, above).
- 3.4.4. As of December 2023, when using the apportionment method of calculation, the landbank stood at 7.88 years, a 12.0% decrease (a reduction of 1.08 years) compared to December 2022, when it stood at 8.96 years³³. When using the tenyear rolling average sales method, the landbank is calculated as being 10.19 years, compared to 11.54 years recorded in the previous year. This represents a 11.66%

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³¹ Paragraph 080 Reference ID: 27-080-20140306

³² Paragraph 083 Reference ID: 27-083-20140306

³³ This has been amended from the previous LAA, due to further interrogation of the data for the Mineral Local plan review Regulation 18 consultation.

- decrease (a reduction of 1.35 years) in the 10-year rolling average landbank. Both values are presented in the figure below, which identifies the landbank value at the end of each year, as informed by the annual Aggregate Survey.
- 3.4.5. The reason the apportionment approach resulted in a smaller landbank change than the ten-year sales average approach is that the plan apportionment is a fixed figure whereas the ten-year rolling sales value varies annually. As the ten-year rolling sales average was an increase on the previous year, there was an increase in the denominator used.

11.54 11.33 12 10.83 10.14 10.12 11 Landbank in Years 10.30 -9.99 10.19 9.29 9.81 10 8.76 9 7.95 7.44 7.61 7.35 7.18 7.55 8 7.88 7 6.90 6 6.74 5 2015 2016 2017 2018 2019 2014 2022 2020 2021 Year Statutory Minimum Landbank Annualised Landbank in Years

Annualised Landbank inc. Pending

Figure 9: Greater Essex Landbank (2014 to 2023)³⁴

10 Year Sales Landbank in Years

inc. Pending reserves

10 Year rolling average sales Landbank

Source: Essex County Council (2024)

Note 1 2019/2020 data collection impacted by furlough due to COVID-19 and therefore sales are potentially under-reported.

Note 2: Y axis not at zero. The data that informs this table is in Appendix F

3.4.6. Irrespective of calculation method, there is at least a seven year landbank as of 31 December 2023, with a landbank of 7.88 years based on the apportionment rate and a ten-year rolling sales landbank of 10.19 years. When including the 'pending reserve' of an additional 4.64Mt in the landbank calculation (Figure 9), it would provide for a 8.76-year annualised landbank under the adopted appointment, and a 11.33-year landbank under the ten-year rolling average sales method of calculation.

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³⁴ Prior to 2009 the apportionment was 4.55mpta, and 4.45Mtpa from 2009 onwards.

3.4.7. The Essex Minerals Local Plan is currently being assessed/reviewed due to the need to review Development Plans within five years of adoption. The impacts of the pandemic delayed the timetable for production but following the initial Issues and Options (Regulation 18) consultation (2021) and further engagement culminating in a further Regulation 18 consultation being consulted upon in Feb/Mar 2024 alongside proposed amendments to the MLP (including an extension to the plan period to 2040) and an initial assessment of the sites received by the Essex MPA as a part of the call for sites exercises..

Forecast of Demand for Sand and Gravel

3.4.8. There are two primary drivers for mineral demand, each with their own difficulties in quantifying a specific figure. These are considered in turn:

Housing Growth

- 3.4.9. As part of the Regulation 18 Review of the Essex Minerals Local Plan, ECC produced a report of comparing current rates of housing delivery with future delivery rates required to meet the need calculated under the Standard Method for forecasting future housing need. It concluded that, since the adoption of the MLP (2014) through to 2019 (latest data at the time of the report), dwelling completions increased by 42%, but current rates of delivery are still below the rate required to satisfy demand derived from the Standard Methodology. The report also identified a required increased rate of dwelling provision of 90% to meet housing provision targets.
- 3.4.10. Growth is expected to be driven by private housing, (housing is the largest subsector in the region)³⁶, hence housing projections are the primary influencer of mineral need. However, whilst it is simple and accurate to conclude that an increase in the rate of housing provision will result in an increased need for mineral provision, a quantifiable link is not possible to calculate. The MWPA uses housing figures only as a proxy for mineral demand as it is not possible to state that X number of houses equates to Y amount of mineral due to the myriad different types and size of housing.

Major Infrastructure Provision

3.4.11. The difficulty of quantifying an increase in mineral need through increased rates of development is exacerbated when considering major infrastructure projects. This is due to economies of scale meaning numerous mineral sourcing strategies can be considered. This includes marine sources, if a project is sizable enough to bespoke landing facilities to be established. Essentially, a significant infrastructure project based in Greater Essex may well be constructed from aggregates sourced from several different administrative areas.

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³⁵ Essex County Council (2021) The <u>Aggregate Provision Paper</u> - Other Relevant Local Information to Justify Aggregate Provision in Essex 2012-2029.

³⁶ ibid

- 3.4.12. As such, it is not possible to accurately quantify future mineral provision on the basis of an administrative boundary, as highlighted in planning and programming of the Lower Thames Crossing³⁷. Here it was stated that the project would require approximately 6% of the Greater Essex and Kent average 10-year annual sales combined, so already a specific Essex figure cannot be derived and does not include aggregate used in pre-cast units transported to the site etc. . The supply of mineral from Transhipment facilities on the River Thames' northern bank would enable the import of aggregate from beyond Greater Essex and Kent.
- 3.4.13. It is important to clarify that Greater Essex is not looking to use this information to offset mineral demand, rather it is not possible to specifically quantify the impact that major infrastructure projects would have on local mineral supply. These are matters for the mineral supply market and are beyond the control of MWPAs.

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³⁷ Highways England (2020) Aggregate Demand for the Lower Thames Crossing briefing paper.

4. Marine-Won Sand & Gravel

- 4.1.1. Marine-won aggregates are an alternative to those extracted from the land, although they cannot always function as a direct substitution, partly due to the saline content. They can be used for some of the same purposes including a variety of construction purposes e.g., road sub-base, land reclamation and beach nourishment.
- 4.1.2. It is understood that the figures presented in this section exclude material dredged from areas not in the ownership of the Crown Estate and material that was removed for navigational purposes, as stated in the East of England Aggregates Working Party Annual Monitoring Repot 2023³⁸.

4.2. Marine Planning

4.2.1. The working of marine resources has substantial economic, environmental, and social value. However, increasing additional pressures such as large-scale renewable energy developments, fishing, as well as demand for aggregate, led to concerns over marine degradation. The Marine and Coastal Access Act (2009) sets out the mechanism for marine planning, which aims to tackle these concerns³⁹.

Figure 10: Marine Planning Areas Close to Greater Essex



Key: 3= East Inshore, 4 = East Offshore, 5 = Southeast Inshore & 6 = South Inshore

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³⁸ EoEAWP (2025) Monitoring Report 2023 Data, page 29, paragraph 2.7.

³⁹ Houses of Parliament PostNote Number 388 (Sept 2011) 'Marine Planning'

Source: Essex County Council (2024) as derived from MMO Marine Planning Areas in England

- 4.2.2. A key tool are marine plans, which contribute to more effective management of marine activities and reduce the degradation of these habitats. Prior to Marine Plans being adopted, there was a limited planning-related evidence-base relating to the marine environment, meaning decisions were undertaken on a risk-based approach to accommodate uncertainty. Marine plans are monitored with a view to ongoing revision in similarity to terrestrial based Local Plans.
- 4.2.3. In England, the Marine Management Organisation (MMO) brings together planning, licensing, and enforcement. The marine planning area closest to Greater Essex is designated as the Southeast Inshore and is covered by the <u>South East Marine Plan</u>. This covers an area of approximately 1,400 kilometres of coastline stretching from Felixstowe to near Dover, a total of over 3,900km² of sea. It is, however, highly likely that the marine planning areas designated as '<u>East Inshore'</u> and <u>East</u> '<u>Offshore'</u>, could also supply marine aggregate to the Greater Essex area, as identified in Figure 10.
- 4.2.4. It is noted that there are three aggregate specific policies (SE-AGG1, SE-AGG2 and SE-AGG3)⁴⁰ in the Southeast Marine Plan which effectively serve as safeguarding policies against the potential for other proposals e.g., offshore wind farm developments compromising the ability to extract known aggregate resources.
- 4.2.5. Both the East Inshore and Offshore plans were adopted in June 2014, with the South East Marine Plan being more recently adopted on 23rd June 2021. Each marine plan has a 20-year horizon, with the MMO reviewing each plan to produce a report every three years after adoption⁴¹. Furthermore, every six years a report is produced by Defra collating the effectiveness of all marine plans together. As such, the MMO held a formal consultation between 15 January 2024 and 12 February 2024, to start the process of replacing the East Marine Plans, as agreed by the Secretary of State in April 2023.

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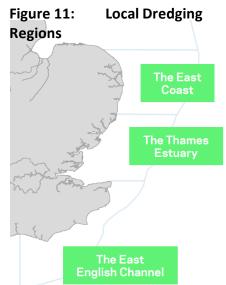
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⁴⁰ Further information regarding the South East Aggregate policies are contained in the technical annex.

⁴¹ The MMO monitor the effectiveness of marine plan policies by using data from indicators and applying a logic model framework. Further information can be found on the MMO's Website.

Dredging Areas & Wharf Facilities Serving Greater 4.3. **Essex**

- 4.3.1. Ports can be considered as 'virtual guarries' due to their ability to sell and distribute mineral, whilst many also have processing facilities. The marine-won material landed in the vicinity of Greater Essex is mainly sourced from the Thames Estuary Licensed Area, as identified in Figure 11. This area extends eastwards from Aldebrough in Suffolk to a line extending east from Margate in Kent. To the north of Aldeburgh is the East Coast Licensing area and to the south of Margate is the English Channel region.
- 4.3.2. The now expired National and Regional Guidelines for Aggregate Provision in England 2005 – 2020⁴², assumed 14 million tonnes (Mt) of marine sand and gravel would be landed in the East of England during that time. This equates to 0.93Mt per year, although it is not apportioned to individual authorities. These Guidelines have not, to date, been replaced.



Source: As derived from Annual Review 2022: Marine Aggregates 2022

4.3.3. Although marine-won minerals contribute to the Greater Essex mineral supply, across Greater Essex there are only active ports in Thurrock that accept marine won aggregate, with other landing points in proximity being in adjoining authorities, namely Ipswich and those within the Thames Estuary. The ports considered to have the potential to serve Greater Essex are shown in Map 4 below and listed in Appendix H. It is noted that the wharves in London are likely to supply the City's needs, with wharves in Kent less viable to supply mineral to Greater Essex, due to the greater road haulage distance, with the associated costs involved. The map also identifies the licensed dredging areas closest to Essex, alongside new dredging application areas and exploration areas.

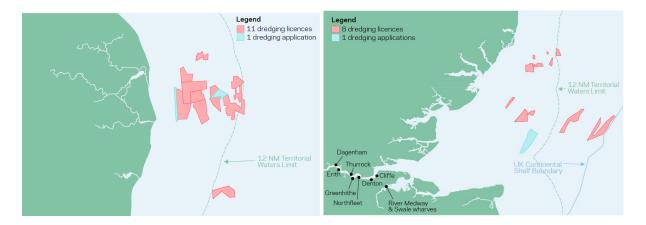
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⁴² The National and Regional Guidelines for Aggregate Provision in England 2005 – 2020 remains the most recent guidance available. It is pending an update by the National Government, which would be based on the 2024 National Aggregate Survey results.

Map 4: Marine Dredging Areas in Proximity to Greater Essex (2023)

East of England

Thames Estuary



Source: The Crown Estate: Marine Aggregates Annual Review (2023) pages 9 and 10.

Note: Each landing port will have several associated wharves. For example, the landing port of West Thurrock includes the wharves of Purfleet and Thurrock as noted in Appendix H

4.3.4. Paragraph 216(e) of the <u>National Planning Policy Framework</u> (2023)⁴³ states (interalia) that MPAs should safeguard existing, planned, and potential facilities for bulk mineral transport including those for marine-dredged materials.

4.4. Marine Aggregate Landings

- 4.4.1. The Crown Estate collects statistics regarding marine-won mineral landed at its ports. There is, however, no requirement for wharves to record the sales destination 44 so it is not known how much is used in Greater Essex or subsequently sold elsewhere. Resultantly, the figures do not relate to the amount of marine-won aggregate used within any one location, rather it is the amount landed. In this case, marine won aggregate landed in the Thames Estuary and/or at Ipswich would usually be used within proximity to these ports, namely within Essex, Thurrock, Southend-on-Sea, Kent, Suffolk, and London, but potentially also further afield. However, due to their mass, landed minerals do not have a large road based economically viable transport distance, so it is likely these marine-won minerals will be used in the surrounding vicinity unless they are transported by rail.
- 4.4.2. It is suggested that the average road delivery distance (of any aggregate) is 38km (24 miles)⁴⁵, with the cost often doubling for each 30 miles travelled. As such

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⁴³ Ministry of Housing, Communities and Local Government (2023) National Planning Policy Framework
⁴⁴ Unless it is sourced for a specific 'significant' project. Such projects are detailed in Crown Estate: <u>Annual Review 2024</u>: <u>Marine Aggregates</u> (2023) pages 16 and 17 and include locally Container Terminal (Felixstowe), London Array Wind Farm, Clacton beach (Essex), Thames Tideway tunnel (London), Queen Elizabeth II Bridge (Dartford), and numerous other major commercial development, regeneration & transport infrastructure projects in London.

⁴⁵ SustainableConcrete.org referenced the source as the Concrete Centre 2010

aggregates are likely to only be transported long distances when it is absolutely necessary⁴⁶. BGS⁴⁷ studies support this and suggests that 60km (37 miles) is the maximum *typical* distance *bulk* aggregates travel by road. It has been concluded that although this isn't stated as an absolute maximum (viability would be considered on a case-by-case basis) it has been inferred that travel distances of large volumes of aggregate would not likely be greater than 37 miles.

- 4.4.3. A Crown Estate Report⁴⁸ identifies dredging and landing statistics in 2023, as shown in the figure below. This highlights the total marine aggregate extracted from the Thames Estuary Area, the additional amount that has permission to be extracted and total marine aggregates landed at the Estuary's ports. Importantly, overall, there has been a steady increase in the amount of marine aggregate that is licensed 'permitted' to be removed, with a corresponding increase in uptake of extraction up to 2018. From 2019, extraction has only ranged between 38% and 56% of the total amount that is permitted to be removed. This means that the industry has the potential to extract much more marine aggregate, without the need for further permissions.
- 4.4.4. A total of 1.53Mt of marine aggregate were removed from the seabed in 2023, meaning that in this year, 35% of the annually permitted/licensed extraction occurred. This is a decrease from the 59% recorded in2022. Between 2014 and 2023, the annual average extraction of that permitted was therefore decreased by 2% to 64%.

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⁴⁶ Mineral Products Association - Aggregates

⁴⁷ British Geological Survey Planning Matters Factsheet "Construction Aggregates", BGS, 2007

⁴⁸Crown Estate (2024) <u>Summary of Statistics</u>, Licences to dredge Marine Minerals on page 2 and Landing Statistics for dredged primary aggregates on page 4 (East Coast) and page 5 (Thames Estuary)

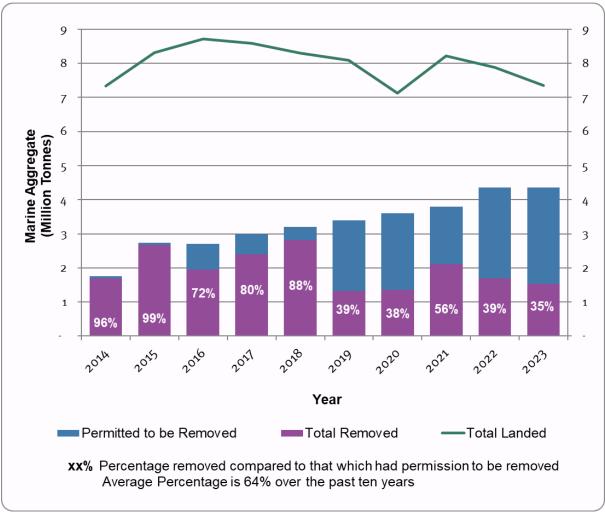


Figure 12: Marine Aggregate Extraction in the Thames Estuary Region (2014 to 2023)

Source: Essex County Council (2024), as derived from data contained within the Marine Aggregates, The Crown Estate Licences, Summary Of Statistics (Crown Estate) reports between 2014 and 2023.

- 4.4.5. The above figure shows that there was a total of nearly 7.35Mt landed within the Thames Estuary area during 2023, as shown in the EoEAWP (2025) Annual Report⁴⁹. This is significantly more than the total removed (1.53Mt). This means that a significant quantity (5.82Mt) was extracted from other licenced areas (such as the East Coast and East English Channel) and subsequently landed within the Thames Estuary Area, presumably to assist with development within Greater London and surrounding areas.
- 4.4.6. As specified with the EoEAWP (2025) <u>Annual Report</u>⁵⁰, with regards to the East of England Region, the total landed was 0.33Mt in 2023⁵¹, whilst 3.41Mt were removed

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⁴⁹ EoEAWP (2025) Annual Report 2023, page 15, paragraph 2.7.

⁵⁰ EoEAWP (2025) Annual Report 2023, page 15, paragraph 2.7.

⁵¹ Crown Estate (2024) <u>Summary Of Statistics</u> Licences to dredge Marine Minerals on page 2 and Landing Statistics for dredged primary aggregates on page 4 (East Coast) and page 5 (Thames Estuary)

- through extraction; supporting the notion that a significant amount was extracted but landed in other regions.
- 4.4.7. The following figure details the amount of marine-won mineral landed in ports within London, Thurrock, Kent, and Suffolk. It is considered that marine dredged minerals landed at these ports have the capacity to be used in Greater Essex.

Figure 13: Marine-Won Mineral Landed in Ports that Could Serve Greater Essex (2014 to 2023)



Source: Essex County Council (2024) as derived from The Crown Estate, Summary of Statistics, 2014 – 2023

The data that informs this table is located in Table A17, Appendix H.

- 4.4.8. There has been a fluctuating amount of marine-won aggregate landed between 2014 and 2023, from 7.38Mt to 7.69Mt, representing an increase of 4.0% in ten years. However, 2023 had an 8.4% decrease in tonnes landed when compared to 2022 figures.
- 4.4.9. When ports are analysed by administrative region, since 2014 there has been an overall decrease in the marine-won aggregate coming into London ports, (13.8%). Kent landed more 41.0% more in 2023 compared to 2014 (127.9%) and Suffolk has

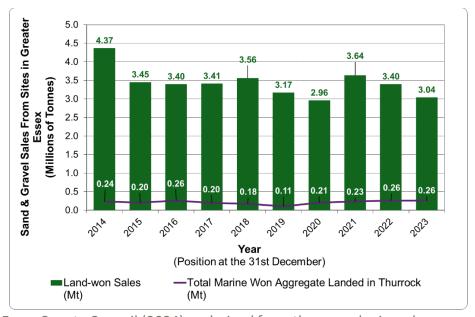
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had significant increases in the same time period (481.3%). Thurrock marine aggregate landings represent a 9.6% increase compared to those in 2014⁵².

4.5. Planned Marine Contribution to Mineral Supply

- 4.5.1. As noted in paragraph 4.4.1, Greater Essex has the potential to be served from further afield⁵³, but is most likely to receive aggregate from the Thames and East Coast dredging regions, due to the prohibitive costs of long-haul road transport of mineral. Licenses have been granted such that 4.35Mt and 7.13Mt (Thames and East Coast respectively) can still be extracted from these two regions annually. This would total 11.48Mt per annum from the two regions combined. It is stated by the Crown Estate⁵⁴ that at this rate, current estimates suggest there are 22 years of primary marine aggregate production permitted in the Thames Estuary and there remains 9 years within the East Coast region. This could be increased through current Licence applications, of which there is only one (in the East Coast Region), totalling 0.65Mtaccording to the Crown Estate⁵⁵.
- 4.5.2. In the graph below there is a comparison between the annual amount of land-won versus marine-won aggregate, from extraction and wharf sites solely within Greater Essex . It can be seen that each year there is a significant amount more land-won aggregate sold, than marine-won aggregate is landed.

Figure 14: Land-won vs Marine-won Aggregate Sales in Greater Essex (2014 to 2023)



Source: Essex County Council (2024) as derived from the annual mineral survey and The Crown Estate, Summary of Statistics, 2014 - 2023

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⁵² Source of all this data is derived from The Crown Estate, Summary of Statistics, 2014 – <u>2023</u>, as <u>presented in</u> Figure 13. <u>Further statistics can be found in Appendix H.</u>

⁵³ e.g., the Humber and East English Channel Regions

⁵⁴ Crown Estate (2024) Marine Aggregates – Annual Review 2023.

⁵⁵ Ibid

4.5.3. It is also noted that the marine-won aggregate resource shown above, is not only a fraction of the land-won sales, it also has the potential to serve markets other than Greater Essex, with the market destination being a commercial decision, and therefore this figure cannot be taken to equate to a marine supply for Greater Essex, with Greater London likely to be a significant consumer.

4.6. Offsetting Land-won Production through Marine-won Aggregate

- 4.6.1. During the examination held into the Essex Minerals Local Plan (Nov 2013) several concerns were raised claiming that marine aggregate imports to Essex have the potential to be increased and make a greater contribution to overall aggregate provision. As such, the Mineral and Waste Planning Authority (MWPA) should not allocate as much land-won aggregate as set out in the then emerging MLP. Consequently, the Planning Inspector required a commitment to monitor the potential for increasing the proportion of marine-won sand and gravel contributing to the future overall County requirement. This resulted in the inclusion of Minerals Monitoring Indicator 3, as reported on through the Essex Authority Monitoring Reports.
- 4.6.2. However, ensuring an increase in the proportion of marine-won sand and gravel to offset the provision required from land-won sources, is outside of the remit of Mineral and Waste Planning Authorities, as marine extraction areas are leased by the Crown Estate, licenses to dredge are applied for by the mineral industry and issued by the Marine Management Organisation (MMO), and it is the minerals industry who develop and operate the mineral dredging fleet and associated landing facilities. Further, sale destinations are a commercial decision taken by the mineral industry over which the MWPA has no control. Land-won and marine-won aggregate are not always directly substitutable in any event⁵⁶. Similarly, it has been noted⁵⁷ that substituting land-won for marine aggregates is linked to economic circumstances and is ultimately market driven.
- 4.6.3. Conversations with the industry have established that marine sources are not constrained by resource availability or by a limit on permitted reserves. This is supported by the data in section 4.4 which shows that there is significantly more marine aggregate permitted to be removed in both the East of England and the Thames Estuary regions, than is removed. Instead, it is believed that constraints are caused by production capability being limited by existing dredger numbers (and their production rate), and their ability to access the market, which is determined by the capacity, depth and location of wharfs and associated infrastructure. For all those reasons given above, it is not considered appropriate to reduce land-won

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⁵⁶ At the EoEAWP meeting (9 Feb 2019), it was noted that marine aggregates in the East tend to be more sandrich and therefore can't simply use dredging to achieve a 50:50 sand: gravel mix so therefore not directly substitutable. A more directly substitutable source would be off the north-eastern coast (c. Hull)

⁵⁷ Source: EoEAWP meeting (9 Feb 2019)

- reserves based on the assumption that they will be replaced by marine-won reserves.
- 4.6.4. MWPAs can however ensure that marine-won sand is able to make an important contribution to land-won mineral by ensuring that wharves and ports are safeguarded from the encroachment of incompatible development that may compromise the ability of these marine facilities to carry out their function. In this regard, MWPAs are supported by the NPPF⁵⁸ which incorporates the 'Agent of Change' Principle. This principle states that where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed.
- 4.6.5. The Essex MWPA produced a Wharf Baseline Capacity Study to assist in the development of the Minerals Local Plan Review (MLPR) (Regulation 18) consultation (March to April 2021). This evidence base document addressed the required commitment to continue to monitor the potential for increasing the proportion of marine-won sand and gravel contributing to the future overall County requirement, and specifically to report on Mineral Monitoring Indicator 3. The requirement of the indicator was to assess whether the amount of marine aggregate landed in Greater Essex is within 90% of existing capacity to see if existing capacity was constraining marine aggregate importation into Greater Essex. The rationale report, informing the MLPR concluded inter-alia "it is currently considered that there are no means to justify a land-won aggregate allocation reduction through a reliance on an increase in marine-won aggregate landings. Furthermore, additional work surrounding the port capacity indicator would not yield additional results, as there is no statutory requirement for operator's participation. It is therefore proposed that the relevant Mineral Monitoring Indicator be removed from the Monitoring Framework, and Policy S6 continues to omit any marine aggregate contribution from its quantification of need." 59 The responses to the MLPR Regulation 18 (2021) consultation are still being analysed as part of on-going consultation process, and any updates to the position will be made available in due course.

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⁵⁸ NPPF (2024) Paragraph 200.

⁵⁹ See paragraph 4.169 of the rationale report for full wording.

5. Imports & Exports of Land-Won Aggregate

5.1. Introduction

5.1.1. Historically, approximately 75% of the mineral extracted within Greater Essex has been used within the area, with the majority of that exported going to London. Greater Essex is heavily reliant on hard rock imports, used as construction material and rail ballast, as well as limestone specifically used in cement making. A pattern of long-distance supply has emerged, with Greater Essex exporting sand and gravel, whilst importing hard rock⁶⁰.

5.2. Methods of Mineral Transportation within Greater Essex

- 5.2.1. Bulk transport modes for mineral movement consist of road, rail, and water. For relatively short movements, the road network is the most efficient and heavily used mode of transport, as this offers flexibility to deliver to any destination. There is also some cross-boundary movement of aggregate by road into and from neighbouring areas, although exportation from Essex to London is predominantly by rail.
- 5.2.2. Rail and water provide the most effective long-distance transhipment opportunities, despite involving 'double handling' i.e., loading and unloading of aggregate on to lorries at each end.
- 5.2.3. Understanding road haulage of minerals is not possible as there is no data collection mechanism establishing supply chains. However, an insight into the bulk movement of mineral at transhipment sites is usually possible through data collected within annual mineral surveys, although only when there are sufficient responses provided which allow publication whilst maintaining commercial confidentiality. As stated in paragraph 3.1.9, where there are less than three separate operators responding to survey requests, this collated data cannot be published, even if those operators provide returns for multiple sites. Any individual data points are destroyed annually once collated for monitoring purposes. As such, where commercial confidentiality cannot be protected, figures cannot be provided, and this information is destroyed with no record being retained.
- 5.2.4. The 2020 the National Aggregate survey provided an in-depth and robust review of the national movements of aggregates for the calendar year 2019. For the first time in 2019, this enabled 'consumption' to be estimated. Due to the strategic nature of this analysis, it is considered that this provides greater insight to the movement of minerals compared to the regional annual aggregate survey. At the time of

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⁶⁰ From areas such as the East Midlands and limestone from the Southwest.

- publishing (April 2025) this data/publication is yet to be published, but it is expected that this will continue to be provided.
- 5.2.5. As noted in section 2.3, in 20233, there were 13 transhipment facilities within Greater Essex, of which nine were active.

Exportation of Sand & Gravel in 2019

5.2.6. As specified in paragraph 5.2.4 above, the most robust and up to date information regarding imports and exports of aggregate is contained within table 9d (page 62) of the National Survey Results⁶¹, as presented below. It should be noted that the rail terminals were not included in the national survey 2019, with only the aggregate exported via wharf facilities considered, to avoid the potential of double-counting of aggregate across the country. The regional survey, on the contrary would consider all rail and wharf facility exportation. This regional survey information has been provided towards the end of this section, where commercial confidentiality allows, to ensure that the importation and exportation of aggregate directly into and out of Essex is captured, as it had no active wharves at present.

Table 2: Source/Destination of Land-won Sand & Gravel in 2019 (Million Tonnes)

Source Region/ Source MPA	Destination	Land won Sand & Gravel (Mt)	MPA %	Marine won Sand & Gravel (Mt)	МРА %
East of	Greater Essex	2.39	81%	0.20	93%
England/ Greater Essex	East of England	0.34	12%	-	-
Greater Essex	Elsewhere	0.21	7%	0.01	7%
MPA	Total	2.94	-	0.21	-

Source: Essex County Council (2021) as derived from table 9d (page 62), BGS/MHCLG (2021) Collation of the results of the 2019 Aggregate Minerals survey.

5.2.7. As can be seen from the table above, of the total sand and gravel extracted within Greater Essex, 81% is used within the same area. The remaining 19% is exported beyond the boundaries of Greater Essex, of which the vast majority (12%) is exported to the East of England. Therefore, only 7% of the total sand and gravel extracted within Greater Essex is exported outside of the East of England, such as to Greater London or the Southeast, for example.

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⁶¹ BGS/MHCLG (2021) Collation of the results of the 2019 Aggregate Minerals survey

Importation of Sand and Gravel in 2019

5.2.8. In similarity to exportation of aggregate, the most robust and up to date information regarding imports and exports of aggregate is contained within table 10 (page 79) of the National Survey Results, as presented below. Only the aggregate exported via wharf facilities is considered, to avoid the potential of double-counting of aggregate across the country.

Table 3: Importation of Sand & Gravel in 2019 to Greater Essex (Million Tonnes)

Source Region/ Source MPA	Land won Sand & Gravel (Mt)	Marine Sand & Gravel (Mt)	Total Sand & Gravel (Mt)	Crushed Rock (Mt)	Total Primary Aggregate (Mt)
East of England/Greater Essex	0.10	1.19	1.29	1.58	2.87

Source: Essex County Council (2021) as derived from table 10 (page 79), BGS/MHCLG (2021) Collation of the results of the 2019 Aggregate Minerals survey.

Note: The columns may not sum due to rounding.

- 5.2.9. The table above identifies that there was little land-won sand and gravel imported into Greater Essex, which should be expected given the extent of the indigenous material. This was supplemented by 1.19Mt of marine-won sand and gravel which was imported into Greater Essex, although as set out above, this does not suggest that 1.19Mt of marine-won sand and gravel was used in Greater Essex as it has the potential to be sold elsewhere and travel onwards.
- 5.2.10. As noted previously in 2.1.1, there are no hard rock deposits withing the Greater Essex sub-region. All hard rock demand within Greater Essex is therefore supplied via importation. It can be seen in the table above that 1.58Mt of hard rock was imported in 2019.

5.3. Greater Essex Consumption of Primary Aggregate in 2019

5.3.1. The 2019 National aggregate survey was the first to identify the 'consumption' of aggregate within sub-regions. This is calculated via the amount extracted and consumed within a sub-region, minus the amount extracted and exported from the sub-region, plus material imported and consumed within the sub-region.

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1.58
29%

2.48
45%

Marine Sand & Gravel

1.39
25%

Crushed Rock

Figure 15: Greater Essex Consumption of Primary Aggregate in 2019 (Million Tonnes)

Source: Essex County Council (2021) as derived from table 11 (page 82), Essex County Council & Thurrock Borough Council, BGS/MHCLG (2021) Collation of the results of the 2019 Aggregate Minerals survey.

Note: this does not include the consumption of any recycled or secondary aggregate within Greater Essex, which was not presented in the results of the national data survey

Note: The columns may not sum due to rounding.

5.3.2. From the figure above, Greater Essex consumed a total of 3.87Mt of sand and gravel (land and marine won combined), with the greater proportion being supplied from land-won sources. 29% of the total consumed was crushed rock, which was imported due to the lack of hard rock geology within the sub-region.

Imports and Exports in 2023

- 5.3.3. As previously noted throughout this document, the British Geological Survey (BGS) has undertaken a national survey on behalf of the Government. As of writing this LAA, the final results have yet to be published. However, an attempt has been made to quantify the preliminary data⁶². This shall need to be reviewed and updated when the final 2023 national data is provided by BGS, in due course.
- 5.3.4. In similarity to the preceding Nation Surveys, Rail transhipment sites are not included in the survey, as this can lead to double counting when reviewed on a national scale.

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⁶² Most recent and up to date received was the 6th November 2024. This preliminary data has also been used to inform the permitted reserve, sales and landbank data in this document and the East of England Annual Monitoring Report for 2023.

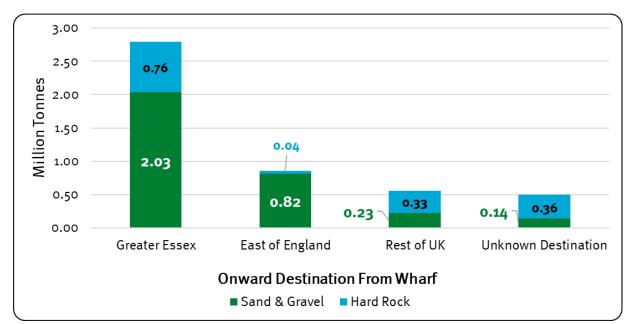


Figure 16: Sales by onward destination from Wharves During 2023 (Million Tonnes)

Source: Essex County Council (2024)

- 5.3.5. It can be seen in the graph above, that in total 3.22Mt of Sand and Gravel and a further 1.49Mt of hard rock quarries were sold from wharves in 2023 (totalling 4.70Mt sales). The majority of this was sand and gravel with sales destined for Greater Essex (2.03Mt sand and gravel (73%) and 0.76Mt Hard Rock (23%)). In addition, there was further sales of sand and gravel, and hard rock destined for other Authorities within the East of England (a total of 0.86Mt combined sand, gravel and hard rock). Strikingly, a further 0.23Mt sand and Gravel and 0.33Mt Hard rock sold from wharves was destined for the areas of the UK outside the East of England. Review of the information received in the survey suggests that the majority of this was destined for London. Unfortunately, there was a similar figure totalling 0.5Mt, which did not have a destination recorded by operators.
- 5.3.6. Therefore, at this stage, despite it not being the most recent collated data, the national aggregate survey results of 2019 provide the most robust data regarding the bulk transhipment of aggregates. Once the final national data is provided by BGS this will be reviewed and updated in any future LAA.

Potential Maximum Throughput of Transhipment Sites

5.3.7. Since 2020, the annual regional aggregate survey operators of transhipment sites were asked to provide data on the potential maximum throughput of aggregate at their sites⁶³. This was a new metric and was designed by the AWP to assist in understanding potential mineral movement to meet future demands. This area is also subject to commercial confidentiality, and despite being requested in the

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⁶³ This is understood to be the maximum feasible capacity of a site taking into account any restrictions such as planning or permit limits (i.e., tonnage restrictions), as well as any other constraints around site size or things imposed by operating conditions (so this would include imposed limits to HGV movements).

surveys, at best there was a 60% response rate in 2022, where 2.77Mtpa was recorded as the maximum throughput annually. As there was only a 60% response rate, it is assumed there is a greater capacity than that stated, although an estimate of maximum capacity cannot be inferred as throughputs vary significantly across sites. Additionally, it would not be appropriate to speculate on facilities that did not provide response to the Survey.

5.3.8. In addition, unfortunately, this metric was not included in the National survey for 2023, which may have resulted in an improved response rate, as the survey was being conducted at the National level. It is hoped that this will be included in future surveys, with a greater operator response rate being realised, to enable a more in depth understanding of potential maximum annual throughput of aggregate at transhipment sites.

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6. Secondary & Recycled Aggregate

6.1. Introduction

- 6.1.1. Secondary and recycled aggregates are alternative sources of aggregate. The revised NPPF (Dec 2024, paragraph 223 (b)) specifically requires MPAs to take account of the contribution made by substitute or secondary and recycled materials and mineral waste before considering the extraction of primary materials whilst aiming to source minerals supplies indigenously.
- 6.1.2. 'Recycled' aggregates are defined within the NPPF as 'aggregates resulting from the processing of inorganic materials previously used in construction, e.g., construction and demolition waste'. This will include crushed concrete, bricks, tiles, glass, asphalt planings and spent railway ballast. Such materials need to comply with national specifications and aggregate standards.
- 6.1.3. 'Secondary' aggregates are created as a by-product of a construction or industrial process⁶⁴. Substantial amounts are processed on construction and redevelopment sites, either at stand-alone permanent facilities or temporary facilities co-located with existing quarries, landfill, and recycling sites for the life of the primary operation.
- 6.1.4. The benefits for maximising the use of these are two-fold. Re-use and recycling reduce the need to extract primary material and reduces the amount of waste needing disposal. This has clear economic, environmental, and social benefits.
- 6.1.5. The Greater Essex Authorities positively encourage re-use and recycling of Construction, Demolition and Excavation (CD&E) waste through policies within their Development Plans. However, this does not mean increasing the importation of CD&E waste from outside of Greater Essex to be recycled would always be acceptable. The NPPF⁶⁵ provides support for the safeguarding of existing facilities from the future development of 'sensitive' uses through the 'Agent of Change' Principle. The Essex and Southend-on-Sea WLP (2017) provides additional capacity through recycling and recovery allocations and safeguards existing and allocated sites to prevent the operation of existing or future facilities becoming compromised due to their proximity to incompatible development which would act to reduce available capacity across the Plan area.

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⁶⁴ Secondary aggregates are defined within the NPPF as 'aggregates from industrial wastes such as glass (cullet), incinerator bottom ash, coal derived fly ash, railway ballast, fine ceramic waste (pitcher), and scrap tyres; and industrial and minerals by-products, notably waste from China clay, coal and slate extraction and spent foundry sand. These can also include hydraulically bound materials'.

⁶⁵ NPPF (Dec 2024) Paragraph 200.

6.2. National Data

- 6.2.1. It is important to understand there remain data limitations associated with secondary and recycled aggregates. Specifically, regarding recycled aggregate, there is no direct way of collating data for recycled aggregate production. Instead, assumptions and proxy's must be used, which is less robust than primary data, as explained below. Other than individual Authorities carrying out additional surveys, for which there is no requirement for industry to complete, (so response rates can be low) the Environment Agency's annually published Waste Data Interrogator (WDI), must be used.
- 6.2.2. The data within the WDI does not account for mobile crushers or recycling and reuse that occurs on individual construction sites where material doesn't leave the site in question. The tonnage of recycled aggregates reported in the WDI is therefore likely to only represent a proportion of the recycled aggregates in circulation. These figures are therefore only estimates and should be treated with caution. To account for this, the combined figure from the WDI is assumed to represent 80% of total available capacity, with an additional 20% added to the figure to account for mobile aggregate recycling facilities 66. Further, secondary aggregates, where certain quality protocol specifications are met, is considered to be non-waste and is therefore not included within the waste tonnage returns.
- 6.2.3. It should also be noted that the values presented using this methodology, are the amount of waste of specific 'European Waste Codes' (classification codes to categorise material types) that enter licenced waste sites. The updated methodology does now specifically removes waste with 'fates' not compatible with recycling and recovery, for example landfill. As such, the methodology is more robust in suggesting that the types of aggregate captured by the new methodology could be termed as 'saleable product' and therefore a material which can offset primary mineral extraction.

6.3. Secondary Aggregate in Greater Essex

6.3.1. Supporting evidence for the Essex and Southend-on-Sea Waste Local Plan 2017 (WLP)⁶⁷ stated that it is not known whether secondary aggregates are produced in any significant quantity in the joint Essex and Southend-on-Sea Plan area. It is however considered that the lack of heavy industry in Greater Essex, suggests that there will be little produced. At present, it is not likely that a study to investigate this aspect will be pursued due to the lack of generating facilities, although any new facilities coming online in Thurrock through wharf developments are being monitored.

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⁶⁶ The updated methodology (published Jan 2024) notes that this metric may not be applicable to more rural authorities. As such Greater Essex has concluded that the urban/rural mix is sufficient to continue to use this 20% assumption.

⁶⁷ ECC/BPP (December 2015) SD 20 - Topic Paper 1 - Waste Capacity Gap Update

6.4. Recycled Aggregate in Greater Essex

- 6.4.1. The updated methodology⁶⁸ contained within the guidance note ⁶⁹ continues to be used in estimating Greater Essex's recycled aggregate production. It considers that for a product to be made from waste, recycled aggregate must meet the 'end of waste' criteria set out the WRAP/ Environment Agency Quality Protocol⁷⁰. The guidance contains standardised methodologies to measure production of recycled aggregate more accurately.
- 6.4.2. The Greater Essex Planning Authorities use the standard methodology for using data, provided by the Environment Agency's Waste Data Interrogator. The Environment Agency regulate waste management facilities, with the submission of this data being a legal requirement of a waste management permit.
- 6.4.3. The updated guidance note (2024) states that when using the EA Waste Data Interrogator (WDI) to determine the amount of waste material sold as recycled aggregate, it is important to note that the data from the WDI excludes the proportion of waste material processed by mobile plant at construction sites. It is noted this will impact more urban areas, than rural, but as Greater Essex represents a mix of urban and rural areas, it is considered important to retain the assumption that the amount of recycled aggregate produced from fixed processing plant represents 80% of the total recycled aggregate produced in a planning area, with the remaining 20% produced from mobile plant at construction sites.
- 6.4.4. This methodology was clarified in an WTAB meeting (24/01/2023) to state that a quarter of the WDI value, when added to the WDI value would equate to 80/20% split as specified in the methodology. Therefore, to ascertain the overall recycled aggregate figure, an additional 20% has been applied to the WDI figure to give an overall tonnage of recycled aggregate production.

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⁶⁸ AWP/WTAB (Jan 2024) RECYCLED AGGREGATES DATA: Guidance on Assessing Levels of Recycled Aggregates, page 3.

⁶⁹ The original and updated guidance on Assessing Levels of Recycled Aggregates (2022 & 2024) was devised on behalf of the regional Aggregate Working Parties and Waste Technical Advisory Board/Planning Advisory Groups. This guidance note links to a regional/national project to standardise aggregate recycling collation data.

⁷⁰ WRAP & The Environment Agency (October 2013) Quality Protocol: Aggregates from inert waste

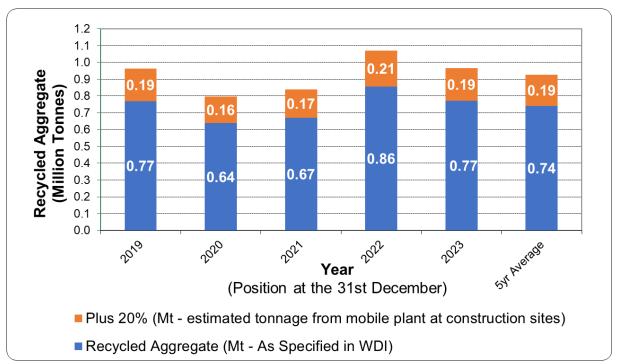


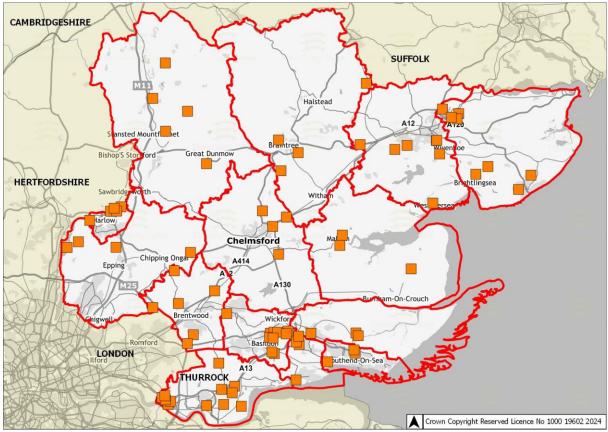
Figure 17: Aggregate Recycling Production In Greater Essex (2019 to 2023)

Source: Essex County Council (2024) as derived from the EA Waste Data Interrogator (WDI) 2019 to 2023 inclusive. Further evidence is available in Appendix C, Table A9:.

Note: All of the data from 2019 - 2022 has been re-analysed in light of the Updated Guidance (Jan 2024) for consistency throughout the analysis period, and therefore differs from figures presented previously in LAAs.

- 6.4.5. It can be seen from the graph above that during 2023, the WDI shows 0.77Mt of recycled aggregate. When also using the 20% uplift specified in the methodology, a total of 0.96Mt of recycled aggregate would have been produced in Greater Essex, which is a decrease of 10.95% on the 2022 level. 2020 represents the lowest aggregate recycling production, it is likely that this can be attributed to the impact of COVID-19 on sales and data collation rather than the reduction in recycled aggregate being truly reflective of the market.
- 6.4.6. The map below identifies the sites that were actively recycling aggregate in 2023.

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Map 5: Location of Producers of Recycled Aggregate (31 December 2023)

Source: Essex County Council (2024) as derived from the EA Waste Data Interrogator (WDI) 2023.

6.4.7. It is noted that most of the facilities considered on this basis are in the southern part of Essex. This is unlikely to be representative of the overall spatial distribution of the recycled aggregate production network as mobile plant is omitted from WDI information. Some facilities will also have temporary permissions⁷¹ meaning that long-term reliance cannot be placed on existing facilities to maintain production capacity. Therefore, additional capacity will continue to be encouraged where located in accordance with relevant mineral and waste plan policies.

Potential Maximum Throughput of CD&E Recycling Facilities in 2023

6.4.8. Within the 2020 to 2023 annual surveys, operators of CD&E Recycling Facilities were asked to provide data on the potential maximum throughput of aggregate recycling at their sites. This was a new metric, which was designed by the AWP to assist in understanding potential mineral movement to meet future demands. As this is based on annual survey returns, the values in the table below only include CD&E recovery potential, where co-located with extraction and transhipment sites in

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⁷¹ Therefore, these will cease production prior to restoration completion at the currently operation active extraction sites.

- Greater Essex. It does not include any potential recovery throughput at stand-alone sites in Greater Essex.
- 6.4.9. Unfortunately, this metric was not included in the National survey for 2023, which may have resulted in an improved response rate, as the survey was being conducted at the National level. It is hoped that this will be included in future surveys, with a greater operator response rate being realised, to enable a more in depth understanding of potential maximum annual throughput of aggregate at transhipment sites.

Figure 18: Potential Maximum Annual Throughput of Co-located CD&E Recycling Facilities within Greater Essex

Year	Potential Maximum Annual Throughput (Mtpa)	% Response Rate
2020	0.74	37.5%
2021	0.83	50.0%
2022	0.97	75.0%
2023	Not collected in the	National Survey

Source: Essex County Council (2024)

6.4.10. As of 31 December 2023 there was at least 0.97Mtpa potential maximum annual throughput of aggregate at extraction and/or transhipment sites in Greater Essex. Although this is stated as the maximum throughput annually, the response rate for this aspect of the aggregate survey was low, suggesting potentially more capacity. However, an estimate of maximum capacity cannot be inferred as production rates vary significantly across sites. Additionally, it would not be appropriate to speculate on facilities that did not provide response to the Survey. It is noted that whilst the figures derived from the survey are likely to be an under-representation of maximum throughput due to the necessary omission of standalone sites, it can be considered that a positive direction is being maintained if the maximum throughput derived from this methodology is increased or at least maintained.

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Secondary & Recycled Aggregate

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Essex County Council, Minerals and Waste Planning

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Greater Essex LAA 2023

Appendices

Appendix A Primary Extraction Facilities within Greater Essex

Table A4: Permitted Primary Aggregate Sites in Essex (31 December 2023).

	Operator		Site Name	Cessation Date for Planning Permission	District /Borough	Easting, Northing (Approx.)
	Part A:		,	Active Sand & Gravel Quarries with Permit	ted Reserves	
1.	Blackwater Aggregates	1.	Bradwell Quarry, Silver End	ESS/12/20/BTE (A7 site extension) commenced 22 August 2022, and extended the end date to: 01 April 2035	Braintree	581900, 221700
	Drott	2.	Alresford Creek, Alresford	30/06/2035	Tendring	660630,222000
2.	Brett Aggregates	3.	Lufkins Farm, Thorrington Road (Agricultural Reservoir)	14 January 2024	Tendring	609700, 222100
3.	Brice Aggregates	4.	Colemans Farm Quarry, Witham ⁷²	20/6/2034	Braintree	583327, 215613

⁷² ESS/51/21/BTE was in the determination process as of 31/12/2022 (see part D of this table (below) for further details).

Appendix A: Primary Extraction Facilities within Greater Essex

	Operator		Site Name	Cessation Date for Planning Permission	District /Borough	Easting, Northing (Approx.)
		5.	Royal Oak, Danbury	16 February 2029	Chelmsford	580300, 205200
4.	Danbury Aggregates	6.	St Cleres Pit, Danbury	Cessation of mineral extraction to 16 February 2029; Cessation of use of the processing plant by 31 December 2031 Restoration of processing plant and stockpile area by 31 March 2032	Chelmsford	576355, 205866
5.	Dewicks	7.	Curry Farm, Bradwell-on-Sea	31 December 2028	Maldon	599365, 205812
7.	Frank Lyons Plant Services Ltd	9.	Blackley Quarry, Great Leighs	5 June 2045, by which time all mineral extraction, landfilling and restoration shall have been completed.	Chelmsford	572800, 219100
8.	G&B Finch Ltd	10.	Asheldham Quarry, Southminster	2029	Maldon	597439, 201505
9.	Heidelberg Materials /	11.	Birch Quarry, Birch	31/12/2029	Colchester	592700, 219300

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	Operator		Site Name	Cessation Date for Planning Permission	District /Borough	Easting, Northing (Approx.)
	Hanson Aggregates	12.	Bulls Lodge Quarry, Boreham	Permission CHL/1019/87 (Airfield) $= 2020^{73}$ (ESS/148/20/CHL) would extend the cessation of extraction to $31/12/2024$ (restoration to be complete by $31/12/2035$) Permission CHL/1890/87 (Park & Brick Farms) = 2030^{74} (ESS/147/20/CHL) would extend the cessation of extraction to $31/12/2039$ (restoration to be complete by $31/12/2041$)	Chelmsford	574600, 210800
10.	Ingrebourne Valley Ltd	13.	Rayne Quarry	Commenced 18 th February 2022 Cessation of extraction 18 February 2035	Braintree	571100, 222900
11.	SRC Ltd	14.	Brightlingsea Quarry	31 January 2026	Tendring	607000, 218800

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⁷³ Application submitted prior to 31st December 2022, currently in determination to extend to 2034 (ref: ESS/148/20/CHL). This will be taken to Committee and, if granted, would require legal agreements to be negotiated/signed.

⁷⁴ Rephasing application also submitted prior to 31st December 2022 currently in determination (ref: ESS/147/20/CHL). This similarly will be taken to Committee and, if granted, would require legal agreements to be negotiated/signed.

Appendix A: Primary Extraction Facilities within Greater Essex

Operator		Site Name	Cessation Date for Planning Permission	District /Borough	Easting, Northing (Approx.)
			Not actively extracting, but processing material from other site		
	15.	Crown Quarry, Ardleigh (Agricultural Reservoir)	14 March 2025	Tendring	602761, 229470
	16.	Elmstead Hall (aka Elmstead Reservoir) (Agricultural Reservoir)	November 2024	Tendring	605763, 225810
	17.	Highwood Quarry, Little Easton	25 March 2026	Uttlesford	559800, 222400
	18.	Sheepcotes Farm	Notified date of commencement 06/05/22 Cessation of mineral extraction to 06 May 2027; Restoration of site by 06 May 2028	Chelmsford	571700, 213700
12. Tarmac Ltd	19.	Colchester Quarry, (aka Stanway Quarry)	2042	Colchester	595400, 222700

Part B:

Inactive Sand & Gravel and Silica Sand Sites with Permitted Reserves

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	Operator	tor Site Name		Site Name Cessation Date for Planning Permission		District /Borough	Easting, Northing (Approx.)
N/A	SRC Ltd	21.	Martells Quarry, Ardleigh	2026 ⁷⁵	Tendring	605027, 228324	
	Total Active Extraction Facilities in Essex (Sand & Gravel): Of which, is also extracting Silica Sand: Total Operators with Active Extraction Facilities in Essex						
	Part C:		Sand & Gravel	Quarries with Permitted Reserves (Not Ad	ctively Extracting	Mineral)	
1.	Edviron Ltd	1.	Crumps Farm, Gt Canfield	2031 (Restoration 2045)	Uttlesford	558400, 221100	
2.	Tarmac Trading Ltd	2.	Wivenhoe Quarry, Sunnymead Extension Wivenhoe	Not yet commenced as of 31 December 2023. Commencement required within 3 years from the approval date of ESS/17/18/TEN (by 18 Dec 2023), cessation of extraction 19 years after commencement, with an addition 2 years for the restoration of the site.	Colchester	605794, 222627	

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⁷⁵ Application submitted prior to 31st December 2022, currently in determination (ref: ESS/29/20/TEN). See <u>part D</u> of this table (below) for further details.

Appendix A: Primary Extraction Facilities within Greater Essex

	Operator		Site Name	Cessation Date for Planning Permission	District /Borough	Easting, Northing (Approx.)
		3.	Wivenhoe Quarry, Wivenhoe	No extraction occurring on site. In restoration.	Colchester	604754, 222688
3.	JJ Prior Ltd	4.	Fingringhoe Quarry, Fingringhoe	2042 Extraction & Transhipment has ceased on site,	Colchester	604321, 221003
4.	Widdington Recycling	5.	Widdington Pit, Widdington	Closed and containing no workable permitted reserves. (ESS/67/21/UTT and ESS/68/21/UTT) are pending Legal Agreements and if permitted would provide a new cessation date of 31 August 2031 and restoration by 31 August 2035.	Uttlesford	552954, 231093
5.	H R Philpot & Son	6.	Salts Green, Chalk End (Part of MLP preferred site Shellows Cross A40)	Not yet commenced as of 31 December 2023. Commencement required within 3 years from the approval date of ESS/77/20/CHL (by 01 March 2025), cessation of extraction six years after commencement, with an addition 2 years for the restoration of the site.	Chelmsford	563032, 209943

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	Operator		Site Name	Cessation Date for Planning Permission	District /Borough	Easting, Northing (Approx.)
	Part E:			Dormant Sand & Gravel Quarries	s ⁷⁶	
1.	S.R. Finch	1.	Straits Mill, Bocking	N/A	Braintree	576800, 224600
2.	-	2.	Alton Park, Clacton	N/A	Tendring	615900, 214100
3.	-	3.	Hodgnells Farm, Gt. Holland	N/A	Tendring	620700, 219300
4.	Devernish Ltd	4.	Hambro Hill, Rayleigh	N/A	Rochford	581400, 191900
Total	sites with permi	tted r	eserves, but not actively ex	tracting mineral:		10
	Part D:	١	New/Extension Site with Ap	pplications Pending Determination/Legal A Provide Additional Sand and Gravel Re		ch If Permitted, Would
1.	SRC Ltd	1.	Martells Quarry (MLP Preferred Site B1)	Remains Pending (Resolved to be Granted subject to conditions & legal agreement) at 31/12/22, (Ref: ESS/29/20/TEN) ⁷⁷	Tendring	604898, 227986

⁷⁶ Sites can be classified as 'Dormant' under the terms of the Planning & Compensation Act 1991 and the Environment Act 1995. Dormant sites cannot be worked until new schemes of conditions have been determined and, therefore, do not contain 'permitted reserves.

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⁷⁷ Application ESS/29/20/TEN remained pending determination as of 31 December 2023. However, it was subsequently granted permission on 31st January 2024. As such this will be update in the next LAA, which covers the calendar year 2024.

Appendix A: Primary Extraction Facilities within Greater Essex

	Operator		Site Name Cessation Date for Planning Permission		District /Borough	Easting, Northing (Approx.)
2.	Brett Aggregates	4.	Lufkins Farm Frating (Agricultural Reservoir)	Pending Determination at 31/12/23, (Ref: ESS/101/21/TEN) ⁷⁸	Tendring	609724, 221921
3.	Brice Aggregates	5.	Coleman's Farm Quarry (Site Extension)	Pending Determination at 31/12/23 (Ref: ESS /36/21/BTE) ⁷⁹	Braintree	583327, 215613
4.	Tarmac Trading Ltd		Land at Stanway Quarry and east of Colchester Zoo (Site Extension)	Pending Determination at 31/12/23 (Ref: ESS/34/23/COL)	Colchester	595599 , 221743
Sites	with 'Pending' P	4				

Source: Essex County Council (2024), as derived from the Aggregate Survey (2024)

Note: Brick clay sites and Chalk sites are no longer listed within this Local Aggregate Assessment, and therefore details are not listed here. For information on these sites, please view the most recently published Authority Monitoring Report.

⁷⁸ Application ESS/29/20/TEN remained pending determination as of 31 December 2023. However, it was subsequently granted permission on 2nd February 2024. As such this will be update in the next LAA, which covers the calendar year 2024.

⁷⁹ Application ESS/36/21/BTE remained pending determination as of 31 December 2023. However, it was subsequently granted permission on 1st February 2024. As such this will be update in the next LAA, which covers the calendar year 2024.

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Table A5: Permitted Primary Aggregate Sites in Thurrock (31 December 2023)

	Operator		Site Name	Cessation Date for Planning Permission	District /Borough	Easting, Northing (Approx.)
	Part A:		0	perational Sand & Gravel Quarries with Pern	nitted Reserves	
1.	Rio Aggregates	1.	Dansand Quarry, Stanford Road, Orsett	2025	Thurrock	565158, 181035
2.	Ingrebourne Valley Ltd	2.	Medina Farm, South Ockendon	2026	Thurrock	557842, 183968
Total	Total Active Extraction Facilities in Thurrock:					2
	Part B: Non Operational Sand & Gravel Quarries with Permitted Reserves					

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Appendix A: Primary Extraction Facilities within Greater Essex

	Operator		Site Name Cessation Date for Planning Permission		District /Borough	Easting, Northing (Approx.)
1.	Ingrebourne	1.	Orsett Quarry, Stanford le Hope	Not active (mothballed). Some restoration work taking place on southwest of site. Also subject to pending application for extension -yet to be determined.	Thurrock	567223, 180614
1.	Valley Ltd	Mill House Farm,		Closed and containing no workable permitted reserves	Thurrock	565879, 179152
	Total sites with permitted reserves, but not actively extracting mineral:		rves, but not actively extracting mineral:		2	
	New/Extension Site with Applications Pending Determination/Legal Agreements, Which I Part C: Provide Additional Sand and Gravel Reserves					
1.	Ingrebourne Valley Ltd	1.	Orsett Quarry & Walton Hall Farm, Linford	Remains Pending Determination as 0f 31 December 2023	Thurrock	567700, 180700

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Operator	Site Name	Cessation Date for Planning Permission	District /Borough	Easting, Northing (Approx.)
	1			

Source: As derived from Thurrock Council & the Aggregate Survey (2024)

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Appendix B Transhipment Facilities within Greater Essex

Table A6: Permitted Mineral Transhipment Sites in Essex (31 December 2023)

	Operator	Site Name / Address	Site Type	End Date	District/Borough	Easting, Northing (Approx.)		
Inac	ctive ⁸⁰ Permitted V	Vharfs						
1.	JJ Prior Ltd 1.	Ballast Qua Ballast Quay F Fingringho Colchester, COS	load e	Closed	Colchester	604300, 221000		
Inac	ctive 'Potential' W	harfs as specified in the Essex N	∕ILP ⁸¹					
1.	Hutchinson Ports 1.	Port of Harwich Parkeston Harwich, CO12		Permanent	Tendring	623348, 232590		
Acti	Active Permitted Rail Depots							

 $^{^{\}rm 80}$ Inactive due to COVID-19 in 2020

⁸¹ Parkeston Quay (East) in Harwich has been identified as potentially providing a large new aggregate import in the form of a marine wharf, although this proposal has, to date, not materialised. As specified in the Essex MLP (2014, pg. 72)

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	Operator		Site Name / Address	Site Type	End Date	District/Borough	Easting, Northing (Approx.)
1.	Aggregate Industries	1.	Chelmsford Rail Depot Brook Street Chelmsford, CM1 1UQ	Receiving Depot (Crushed Rock)	Permanent	Chelmsford	571273, 207450
1.	UK Ltd	2.	Harlow Rail Depot Station Approach, Harlow, CM20 2EL	Receiving Depot (Crushed Rock)	Permanent	Harlow	547000, 212200
		3.	Harlow Rail Depot Station Approach, Harlow, CM20 2EL	Receiving Depot (Crushed Rock)	Permanent	Harlow	547000, 212200
2.	Tarmac Ltd	4.	Marks Tey Rail Depot North Lane Marks Tey Colchester, CO6 1ED	Receiving and loading point (Crushed Rock & Sand & Gravel)	Permanent	Colchester	591800, 224000
	Total Transhipment Facilities in Essex (Permitted): Total Transhipment Facilities in Essex (Potential)						5 1

Source: Essex County Council (2024), as derived from the Aggregate Survey (2024)

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Appendix C: Aggregate & Secondary Recycling Facilities within Greater Essex

Table A7: Permitted Mineral Transhipment Sites in Thurrock (31 December 2023⁸²)

	Operator		Site Name / Address	End Date	Aggregate Type	District/ Borough	Eastings, Northings (Approx.)
	Part A:			Active F	Permitted Wharfs		
1.	Aggregate Industries UK Ltd	1.	DP World Berth 7, London Gateway Drive, Stanford Le Hope, SS17 9PD	27 February 2027	Aggregate	Thurrock	572093,181395
2.	Tarmac Trading Ltd	2.	Thurrock Wharf Thurrock Marine Terminal, Oliver Close, West Thurrock Grays, RM20 3EE	Permanent	Aggregate	Thurrock	557417, 176960
3.	Stema Shipping Ltd	3.	1 Berth, Tilbury Docks, Tilbury, RM18 7HL	Permanent	Crushed Rock, Aggregate	Thurrock	563226, 175637
3.	Tilbury Wharf	3.	Fort Road Tilbury, RM18 8UL Expected to commence 2022	Permanent	Various aggregates Import and export by rail	Thurrock	566166, 175634

⁸² Within the Active Permitted rail Depots section, a note has been added as to what kind of Handling facility has been added (Receiving and/or loading) This information was found via Network Rail

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	Operator		Site Name / Address	End Date	Aggregate Type	District/ Borough	Eastings, Northings (Approx.)
	Part B: Inactive Permit					d Wharfs	
1.	Hanson	1.	Purfleet Wharf Aveley, RM19 1RP	Permanent	Jetty wharfs remain but site occupied by Hanson cement and does not appear to import aggregate	Thurrock	557092, 176953
2.	Port of Tilbury, S. Walsh & Sons	2.	Port of Tilbury, Berth 34	Permanent	Import Secondary Aggregate	Thurrock	563178, 175178
	Part C:				Active Permitted R	ail Depots	
1.	Aggregate Industries UK Ltd	1.	Purfleet Rail Depot Jurgens Road Off London Road Purfleet, RM19 1UA	Permanent	Crushed Rock and Other (Receiving Depot)	Thurrock	556551, 177167
2.	Port of Tilbury, FM Conway	2.	Port of Tilbury, Bulk Rail Terminal Tilbury, RM18 7EH	Permanent	Marine imported sea dredged crushed rock. exported by rail. Secondary aggregate.	Thurrock	562593, 176996

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Appendix C: Aggregate & Secondary Recycling Facilities within Greater Essex

	Operator		Site Name / Address	End Date	Aggregate Type	District/ Borough	Eastings, Northings (Approx.)
	Part D: Inactive Permitted Rail Depots			•			
1.	Rail depot, Port of Tilbury, S. Walsh & Sons	1.	Port of Tilbury, Berth 34	Permanent	Crushed Rock	Thurrock	563178,175178
2.	Tilbury 2	2.	CMAT Rail Facility Tilbury 2 Power Station, Fort Road Tilbury, RM18 7NR	Permanent	Various aggregates Import and export by rail. Commenced 2022	Thurrock	566186, 175858
Tota	Total Transhipment Facilities in Thurrock						11

Source: As derived from Thurrock Council & the Aggregate Survey (2024)

Appendix C Aggregate & Secondary Recycling Facilities within Greater Essex

This list of aggregate recycling facilities was generated via the methodology outlined in Recycled Aggregates Data: Guidance on Assessing Levels of Recycled Aggregates (January 2024). In summary the following European Waste Classification codes are interrogated to give an estimate of the amount of construction, demolition and excavation waste which is suitable for use as a recycled aggregate (excluding soil and glass, which are not generally used as recycled aggregates).

- Construction & Demolition Waste 17 01 01 concrete / 17 01 02 bricks / 17 01 03 tiles / 17 01 07 mixed / 17 03 03 bituminous / 17 05 08 track ballast / 17 09 04 mixed
- Waste from physical and chemical processes 01 04 08 / 01 04 09

Subsequently the processes/fates which do not result in a material which can be sold as a recycled aggregate (Combustion, Incineration, Landfill, Mining, MRS, On/in land, and Long-Term Storage) are filtered out.

Table A8: Active Aggregate Recycling Facilities in Greater Essex (2023)

Mineral Planning Authority	Site Name	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
Essex	Neil Sullivan Sons Recycling Centre Tennis Courts	NEIL SULLIVAN & SONS LIMITED	577135 190495	Inert/C+D	ACTIVE	Unknown - Not ECC Permission

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Appendix C: Aggregate & Secondary Recycling Facilities within Greater Essex

Mineral Planning Authority	Site Name	Operator	tor Grid Reference Mineral Status		Status	Planning Permission End Date
Essex	JAC YARD-BONVILLE FARM	J.A.C GROUNDWORK & CIVIL ENGINEERING LTD	577030 190350	Inert/C+D	ACTIVE	Unknown - Not ECC Permission
Essex	Blunts Wall Farm	LITTMODEN PLANT HIRE LIMITED	565725 194087	Inert/C+D	ACTIVE	Permanent
Essex	Cohart Asbestos Disposal Limited	COHART ASBESTOS DISPOSAL LIMITED	573647 190522	Inert/C+D	ACTIVE	Permanent
Essex	Hovefields Court	T L M MANAGEMENT LIMITED	572881 190533	Inert/C+D	ACTIVE	Permanent
Essex	Archers Fields	CLEARAWAY RECYCLING LIMITED	573638 190273	Inert/C+D	ACTIVE	Permanent
Essex	Terminus Drive	MR JAMES HEARD & MRS MARIE HEARD	573637 187574	Inert/C+D	ACTIVE	Permanent
Essex	Leigh Skips Transfer Station	Alan M Stone	573731 190304	Inert/C+D	ACTIVE	Unknown - Not ECC Permission

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Mineral Planning Authority	Site Name	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
Essex	Batemans Farm	G. & B. FINCH LIMITED	574510 218424	Inert/C+D	ACTIVE	Permanent
Essex	T & K Weavers Demolition	T & K WEAVERS DEMOLITION LIMITED	589462 234062	Inert/C+D	ACTIVE	Permanent
Essex	Braintree Recycling Centre for Household Waste	ESSEX COUNTY COUNCIL	574665 224359	Inert/C+D	ACTIVE	Permanent
Essex	All Clear Skip Hire	W J HEDGER, M W R HEDGER & P W J HEDGER	578036 221776	Inert/C+D	ACTIVE	Permanent
Essex	Bushcade Ltd	BUSHCADE LIMITED	563628 197934	Inert/C+D	ACTIVE	Unknown - Not ECC Permission
Essex	Unit A	FERNS SURFACING LIMITED	559234 188583	Inert/C+D	ACTIVE	Unknown - Not ECC Permission
Essex	Wotton Green Works	SKIPPY GRABS & GROUNDWORKS LIMITED	552936 195053	Inert/C+D	ACTIVE	Unknown - Not ECC Permission

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Appendix C: Aggregate & Secondary Recycling Facilities within Greater Essex

Mineral Planning Authority	Site Name	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
Essex	Brentwood RCHW	ESSEX COUNTY COUNCIL	557379 195593	Inert/C+D	ACTIVE	Permanent
Essex	Heatherland Ltd, Stondon Massey	HEATHERLAND LIMITED	556243 201888	Inert/C+D	ACTIVE	
Essex	G J Bowmer	GJ BOWMER (WASTE DISPOSAL) LIMITED	559999 190415	Inert/C+D	ACTIVE	Permanent
Essex	PR BATES SERVICES	PR BATES SERVICES	578204 190360	Inert/C+D	ACTIVE	
Essex	Essex County Skips Ltd	ESSEX COUNTY SKIPS LIMITED	577748 189475	Inert/C+D	ACTIVE	Permanent
Essex	A A Quickskips	Brian Wallace	577756 189193	Inert/C+D	ACTIVE	Unknown - Not ECC Permission
Essex	Waste Transfer Station	A TEAM SERVICES LIMITED	577550 183400	Inert/C+D	ACTIVE	
Essex	Sandon Quarry Recycling Facility	BRETT AGGREGATES LIMITED	574641 204041	Inert/C+D	ACTIVE	

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Mineral Planning Authority	Site Name	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
Essex	Dunmow Skips Ltd	DUNMOW SKIPS LIMITED	571805 211243	Inert/C+D	ACTIVE	Unknown - Not ECC Permission
Essex	Chelmsford RCHW	ESSEX COUNTY COUNCIL	573646 209121	Inert/C+D	ACTIVE	Permanent
Essex	Chelmsford Transfer & Recycling Facility	& BIFFA WASTE 575951 210632 Inert/C+D ACTIV		ACTIVE	Permanent	
Essex	Mason Trucking Company	MASON TRUCKING CO LIMITED	588699 223065	Inert/C+D	ACTIVE	Unknown - Not ECC Permission
Essex	ATS Mini Skips	ATS Mini Skips Limited	602008 223776	Inert/C+D	ACTIVE	Unknown - Not ECC Permission
Essex	Colchester Recycling	Tarmac Trading Limited	594952 222484	Inert/C+D ACTIVE		
Essex	CORE FUSION LIMITED	CORE FUSION LIMITED	602250 223457	Inert/C+D	ACTIVE	Unknown - Not ECC Permission
Essex	Mersea Island RCHW	ESSEX COUNTY COUNCIL	601255 213117	Inert/C+D	ACTIVE	Permanent

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Appendix C: Aggregate & Secondary Recycling Facilities within Greater Essex

Mineral Planning Authority	Site Name	Operator	Grid Reference	Mineral	Status	Planning Permission End Date	
Essex	Colchester RCHW	ESSEX COUNTY 596757 223105 Inert/C+D COUNCIL		ACTIVE	Permanent		
Essex	Cooks Skip Hire	Peter Foster	602390 221501	Inert/C+D	ACTIVE	Unknown - Not ECC Permission	
Essex	J & R Haulage	J & R HAULAGE LIMITED	·		Unknown - Not ECC Permission		
Essex	UK Crushing & Development Ltd	nt UK CRUSHING & 558916 204601 II DEVELOPMENT LIMITED		Inert/C+D	ACTIVE		
Essex	Evans Thornwood	Evans Thornwood JOHN EVANS, 5 TIMOTHY EVANS, TERRY EVANS		Inert/C+D	ACTIVE	Permanent	
Essex	Harvey Automobile Engineering	Martin Harvey	538092 205473	Inert/C+D	ACTIVE	Permanent	
Essex	R B WHITBREAD (PLANT HIRE) LIMITED		542308 210614	Inert/C+D	ACTIVE	Unknown - Not ECC Permission	

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Mineral Planning Authority	Site Name	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
Essex	Mead Park Depot, Harlow	H T S (PROPERTY AND ENVIRONMENT) LIMITED	545579 211896 Inert/C+D A		ACTIVE	Permanent
Essex	Harlow RCHW	ESSEX COUNTY COUNCIL	546952 212467	Inert/C+D	ACTIVE	Permanent
Essex	David Brown Skip Hire and Recycling	David Romanus Brown	546938 212401	Inert/C+D	ACTIVE	Permanent
Essex	Sortera Limited, Unit 7 River Way	Sortera Limited	546653 212634	Inert/C+D	ACTIVE	Permanent
Essex	Asheldham Quarry	G. & B. FINCH LIMITED	597451 201569	Inert/C+D	ACTIVE	Tied to life of quarry. See Appendix 2
Essex	Maldon RCHW	ESSEX COUNTY COUNCIL	586280 206186	Inert/C+D	ACTIVE	Permanent
Essex	Green Recycling Limited	GREEN RECYCLING LIMITED	585758 207538	Inert/C+D	ACTIVE	Permanent

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Appendix C: Aggregate & Secondary Recycling Facilities within Greater Essex

Mineral Planning Authority	nning Site Name Operator		Grid Reference	Mineral	Status	Planning Permission End Date	
Essex	Rayleigh RCHW	ESSEX COUNTY COUNCIL	580666 190186	Inert/C+D	ACTIVE	Permanent	
Essex	Brickfields Way Transfer Station	JAMES WASTE MANAGEMENT LLP	588227 190181 Inert/C+D ACTIVE		Permanent		
Essex	Sortera Limited, Ecologic Yard	Sortera Limited	588341 190248	Inert/C+D	ACTIVE	Permanent	
Essex	Brickfields Way Transfer Station	JAMES WASTE MANAGEMENT LLP	588227 190181	Inert/C+D	ACTIVE	Permanent	
Essex	Crown Quarry	Sewells Reservoir Construction Limited	602688 229533	Inert/C+D	ACTIVE	Tied to life of quarry. See Appendix 2	
Essex	Martells Yard	Sewells Reservoir Construction Limited	605094 228278	Inert/C+D	ACTIVE	Permanent	
Essex	Wright Skips	WRIGHT SKIPS ENVIRONMENTAL LIMITED	610632 218643	Inert/C+D	ACTIVE		

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Mineral Planning Authority	Site Name	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
Essex	Clacton Civic Amenity Site	ESSEX COUNTY COUNCIL	615596 214892	Inert/C+D	ACTIVE	Permanent
Essex	Pitsea RCHW	CHW ESSEX COUNTY 573676 1870 COUNCIL		Inert/C+D	ACTIVE	Permanent
Essex	Martells Quarry	Sewells Reservoir Construction Limited	605060 228150	Inert/C+D	ACTIVE	Tied to life of quarry. See Appendix 2
Essex	Eastern Waste Disposal Ltd	EASTERN WASTE DISPOSAL LIMITED	608650 218080	Inert/C+D	ACTIVE	Permanent
Essex	Bob's Skips	EASTERN WASTE DISPOSAL LIMITED	618706 218031	Inert/C+D	ACTIVE	Unknown - Not ECC Permission
Essex	Collins Skip Hire	SHOTLEY HOLDINGS LIMITED	604781 228216	Inert/C+D	ACTIVE	Permanent
Essex	Collect - A - Way	lan Justin Barnett	618582 217925	Inert/C+D	ACTIVE	Permanent
Essex	Home Farm	ESSEX WASTE LIMITED	555140 225614	Inert/C+D	ACTIVE	
Essex	Haigh Recycling	Russell Haigh	559526 229161	Inert/C+D	ACTIVE	Permanent

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Appendix C: Aggregate & Secondary Recycling Facilities within Greater Essex

Mineral Planning Authority	Site Name	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
Essex	Mawkinherds Farm	ECO PLAN ENVIRONMENTAL LIMITED	563997 218783	Inert/C+D	ACTIVE	Unknown - Not ECC Permission
Essex	Saffron Walden RCHW	ESSEX COUNTY COUNCIL	555219 237298	98 Inert/C+D ACTIVE		Permanent
Essex	Widdington Pit	WIDDINGTON RECYCLING LTD	552918 231094	Inert/C+D	ACTIVE	Tied to life of quarry. See Appendix 2
Southend-on- Sea	W & H (Roads) Ltd	W & H (ROADS) LIMITED	587831 188179	Inert/C+D	ACTIVE	
Southend-on- Sea	Stock Road Recycling Centre	VEOLIA ES (UK) LIMITED	, , ,		ACTIVE	Permanent
Southend-on- Sea	Leigh Marsh Civic Amenity Site	VEOLIA ES (UK) LIMITED	583069 185668	Inert/C+D	ACTIVE	Permanent
Thurrock	Burrows Farm Transfer Station - EPR/WP3831JT	SIMS Environmental Ltd	564510 185080	Inert/C+D	ACTIVE	N/A

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Mineral Planning Authority	Site Name	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
Thurrock	Unit 5 Bennett's Industrial Estate	HENDERSON & TAYLOR PUBLIC WORKS LIMITED	565340 178135	Inert/C+D	ACTIVE	N/A
Thurrock	Recycled In Orsett	RECYCLED IN ORSETT LIMITED	565171 181136	Inert/C+D	ACTIVE	Tied to life of quarry. See Appendix 2
Thurrock	Brocks Haulage	BROCKS HAULAGE LIMITED	558223 176835	Inert/C+D	ACTIVE	Permanent
Thurrock	Botany Quarry, Purfleet	KILLOUGHERY WASTE MANAGEMENT LIMITED	555795 178278	Inert/C+D	ACTIVE	Subject to redevelopment of Purfleet centre
Thurrock	Rainbow Shaw Treatment	CLEARSERVE LIMITED	566748 180366	Inert/C+D	ACTIVE	2025
Thurrock	Modern Skips 2014 Limited	MODERN SKIPS 2014 LIMITED	554619 179872	Inert/C+D	ACTIVE	Permanent
Thurrock	Seales Road Haulage Ltd	SEALES ROAD HAULAGE LIMITED	554775 179720	Inert/C+D	ACTIVE	N/A

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Appendix C: Aggregate & Secondary Recycling Facilities within Greater Essex

Mineral Planning Authority	Site Name	me Operator Grid Reference Mineral		Status	Planning Permission End Date	
Thurrock	J W L Services U K Limited	J W L SERVICES (UK) LIMITED	563724 187432	Inert/C+D	ACTIVE	
Thurrock	East Tilbury Quarry	ry S WALSH & SON 568688 177751 Inert/C+D ACTIVE		Site currently in restoration		
Thurrock	Buckingham Hill Civic Amenity Site	THURROCK COUNCIL	567061 181274	Inert/C+D	ACTIVE	Permanent
Thurrock	West Thurrock Recycling and Transfer Station	P F AHERN (LONDON) LIMITED	557637 177043	Inert/C+D	ACTIVE	Permanent
Thurrock	Buckingham Hill Civic Amenity Site	THURROCK COUNCIL	567061 181274	1274 Inert/C+D ACTIVE		Permanent
Thurrock	nurrock Berth 34 S WALSH & SON LIMITED	562967 175388	Inert/C+D	ACTIVE	Permanent	

Source: Essex County Council (2024), as derived from the EA Waste Data Interrogator (WDI) 2019 to 2023 inclusive.

Note: This list has been generated from the best practice methodology, AWPs/WRAP, Guidance on Assessing Levels of Recycled Aggregates (2022)

Note: The entries marked as Essex for Cranfield Haulage (Postcode: MK43 0XP) and Haverhill Recycling Facility (Postcode: CB9 7AE) as these are the outside of Greater Essex, and therefore should not be included in the calculations.

Table A9: Recycled Aggregate Production at Facilities in Greater Essex (2019 to 2023)

Greater Essex Local Aggregate Assessment 2023: Published 2024

Year	Total number of Fixed Facilities Producing Recycled Aggregate	Total Number of Operators Operating these Fixed Facilities	Total Recycled Aggregate Produced at Fixed Facilities (Mt)	20% Mobile Plant Allowance (Mt)	Estimated Total Recycled Aggregate Produced at Fixed Facilities and + 20% Mobile Plant Allowance (Mt)	Percentage Change on Previous Year	Percentage Change since 2019
2019	79	61	0.77	0.19	0.96	N/A	N/A
2020	79	65	0.64	0.16	0.80	-20.67% ♥	-20.67% ♥
2021	81	67	0.67	0.17	0.84	4.80% 🛧	-14.88% ♥
2022	94	73	0.86	0.21	1.07	21.82% 🛧	10.19% 🛧
2023	79	62	0.77	0.19	0.96	-11.14% ♥	0.19% 🛧

Source: Essex County Council (2024), as derived from the EA Waste Data Interrogator (WDI) 2019 to 2023 inclusive.

Note: The methodology and guidance published in May 2022 to ensure standardisation of aggregate recycling rates, was revised in January 2024. ECC continues to use the method using the WDI to gauge this metric, although the guidance has been reviewed, which alters previous values presented here. For continuity, all data presented in the table has been reviewed to concur with the revised methodology. ECC continues to ascertain the overall recycled aggregate figure a quarter of the value provided by the WDI was applied to the figure to give an overall tonnage of recycled aggregate production, which accords with the long standing advice at the WTAB meeting on 24/01/2023 regarding the use of the methodology.

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Appendix D Permitted Primary & Secondary Processing Plant in Greater Essex (31 December 2023)

Table A10: Permitted Processing Plant in Essex (31 December 2023)

	All sites in this table are located at existing mineral facilities, safeguarded by the Mineral Planning Authority						Plant Permitted on Site ⁸³				
Operator	Quarry / Transhipment Facility	Site Status (2023)	End Date	Primary Processing	Bagging	Concrete / Mortar Batching	Coated Roadstone	Aggregate Recycling Facility ⁸⁴	Transhipment Facility ⁸⁵		
Aggregate	Chelmsford Rail Depot (Receiving Depot)	Active	Permanent						✓ (MLP – F1)		
Industries	Harlow Mill Rail Station (Receiving Depot)	Active	Permanent			√			✓ (MLP – F2)		

⁸³ This only includes processing plants on extraction and transhipment sites that have been permitted by the Mineral Planning Authorities. It does not include any aggregate processing facilities that have been permitted by individual Local Planning Authorities in other locations (such as on industrial sites, according to local planning policies).

⁸⁴ There are additional Aggregate Recycling Facilities, which are not co-located with Mineral Extraction/Transhipment Sites.

⁸⁵ As specified by Network Rail in <u>Rail served aggregates and minerals handling locations</u> (2016)

Appendix D: Permitted Primary & Secondary Processing Plant in Greater Essex (31 December 2023)

	s table are located at arded by the Mineral					Plant Perr	nitted on Site	83	
Operator	Quarry / Transhipment Facility	Site Status (2023)	End Date	Primary Processing	Bagging	Concrete / Mortar Batching	Coated Roadstone	Aggregate Recycling Facility ⁸⁴	Transhipment Facility ⁸⁵
	Essex Regiment Way, Chelmsford	Active	Permanent				√		
Blackwater Aggregates	Bradwell Quarry, Bradwell	Active	01/04/2035	✓	✓	✓			
	Alresford Creek, Alresford ⁸⁶	Active	30/06/2035	✓		√ (LPA Permission)			
Brett Aggregates	Brightlingsea Quarry, Brightlingsea	Active	31/01/2026	✓					
	Elsenham Quarry, Elsenham	Inactive ⁸⁷	2029	✓				√	

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⁸⁶ Not extracting material from site at present. Only importing from Lufkins Farm (Brett site) for processing and onward transportation

⁸⁷ Elsenham Quarry is inactive in terms of mineral extraction but is active only in terms of infilling/landfill, as such the plant listed above are permitted but not on site.

	table are located at rded by the Mineral	_				Plant Perr	mitted on Site	83	
Operator	Quarry / Transhipment Facility	Site Status (2023)	End Date	Primary Processing	Bagging	Concrete / Mortar Batching	Coated Roadstone	Aggregate Recycling Facility ⁸⁴	Transhipment Facility ⁸⁵
Brice Aggregates	Colemans Farm Quarry	Active	30/06/2034			√ 88			
Danbury Aggregates	St. Claires, Danbury	Active	16/02/2029	✓					
Dewicks	Curry Farm, Bradwell-on-Sea	Active	31/12/2028	✓					
Frank Lyons Plant Services	Blackley Quarry, Great Leighs	Active	05/06/2045	✓		✓ (Inactive)			
G&B Finch	Asheldham Quarry, Asheldham	Active	2029	√		√		√	
Heidelberg Materials /	Birch Quarry, Birch	Active	31/12/2029	✓	Granted in 2023	1			

⁸⁸ The Concrete / Mortar Batching plant was permitted by ESS/11/20/BTE on 4 June 2021

Appendix D: Permitted Primary & Secondary Processing Plant in Greater Essex (31 December 2023)

	table are located at rded by the Mineral				Plant Permitted on Site ⁸³				
Operator	Quarry / Transhipment Facility	Site Status (2023)	End Date	Primary Processing	Bagging	Concrete / Mortar Batching	Coated Roadstone	Aggregate Recycling Facility ⁸⁴	Transhipment Facility ⁸⁵
Hanson Aggregates	Bulls Lodge Quarry, Boreham	Active	31/12/2030	✓	√	√	✓	✓	
	Haverhill Ready- mixed Concrete Plant	Active	Permanent			✓			
	Rayne Quarry	Active	18/02/2035	✓					
Ingrebourne Valley	Newport Chalk Quarry, Newport	Active	2031					✓ Inactive	
JJ Prior Ltd	Fingringhoe Quarry, Fingringhoe	Inactive	2042 (or when stockpiles exhausted)						✓ (MLP - D2)
Tarmac Ltd	Colchester Quarry, Stanway	Active	31/10/2026	✓		✓	√	✓	

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	s table are located at our areast are standard by the Mineral I			Plant Perr	mitted on Site	83			
Operator	Quarry / Transhipment Facility	Site Status (2023)	End Date	Primary Processing	Bagging	Concrete / Mortar Batching	Coated Roadstone	Aggregate Recycling Facility ⁸⁴	Transhipment Facility ⁸⁵
	Harlow Mill Rail Station (Receiving Depot)	Active	Permanent				~		✓ (MLP – F2)
	Marks Tey Rail Depot (Receiving and loading point)	Active	Permanent						√ (MLP – F3)
	Crown Quarry, (Agricultural Reservoir) Ardleigh	Active	14/03/2025	✓	√ 89	√		√	
	Dollymans Farm, Wickford	Active	2031					✓	

⁸⁹ The bagging plant at Crown Quarry is pending retrospective determination (ESS/07/20/TEN)

Appendix D: Permitted Primary & Secondary Processing Plant in Greater Essex (31 December 2023)

	s table are located at arded by the Mineral					Plant Perr	nitted on Site	83	
Operator	Quarry / Transhipment Facility	Site Status (2023)	End Date	Primary Processing	Bagging	Concrete / Mortar Batching	Coated Roadstone	Aggregate Recycling Facility ⁸⁴	Transhipment Facility ⁸⁵
	Elmstead Hall ⁹⁰ (Agricultural Reservoir)	Active	November 2024	√					
	Highwood Quarry, Little Easton	Active	25/03/2026	✓	✓	~		✓	
	Martells Quarry, Ardleigh	Active	2026	✓		✓		√	
	Sheepcotes Farm ⁹¹ (Agricultural Reservoir) (Not commenced Planning Permission	Inactive	06/05/2027	✓ Inactive					

⁹

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 $^{^{91}}$ Sheepcotes commenced 06 May 2022, the end date therefore is 2027 for extraction and processing.

	table are located at rded by the Mineral			Plant Perr	nitted on Site	83			
Operator	Quarry / Transhipment Facility	Site Status (2023)	End Date	Primary Processing	Bagging	Concrete / Mortar Batching	Coated Roadstone	Aggregate Recycling Facility ⁸⁴	Transhipment Facility ⁸⁵
	ESS/01/18/CHL by 31 December 2021)								
Widdington Recycling Ltd	Widdington Pit, Widdington	Active	<mark>2022⁹²</mark>	✓				√	
Hutchinson's Ports	Port or Harwich ⁹³	Inactive	Permanent						✓ (MLP – F4)
	TOTAL Permitted=				4 (-)	12 (-)	4 (❤)	10 (-)	6 (-)

Source: Essex County Council (2024)

Key:

(1) = An increase in facilities since the last edition of the LAA

(♥) = An increase in facilities since the last edition of the LAA

(-) = No change in the number of facilities since the last edition of the LAA

⁹² There is a resolution to extend life of Widdington to 2031

⁹³ Parkeston Quay (East) in Harwich has been identified as potentially providing a large new aggregate import in the form of a marine wharf, although this proposal has, to date, not materialised. As specified in the Essex MLP (2014, pg. 72)

Appendix D: Permitted Primary & Secondary Processing Plant in Greater Essex (31 December 2023)

Table A11: Permitted Processing Plant in Thurrock (31 December 2023)

	s table are located a arded by the Minera			Plant Pe	rmitted on Si	te			
Operator	Quarry / Transportation Facility	Site Status (2023)	End Date	Primary Processing	Bagging	Concrete / Mortar Batching	Coated Roadstone	Aggregate Recycling Facility ⁹⁴	Transhipment Facility ⁹⁵
Aggregate	DP World London Gateway	Active	Permanent						Wharf
Industries	Purfleet Rail Depot, (Jurgens Road)	Active	Permanent					√	Rail
Port of Tilbury, FM Conway	Tilbury Bulk Rail Terminal	Active	Permanent						Rail
Hanson Aggregates / Civil & Marine	Purfleet Wharf, West Thurrock (a.k.a Dagenham	Active?	Permanent						Wharf

⁹⁴ There are additional Aggregate Recycling Facilities, which are not co-located with Mineral Extraction/Transhipment Sites.

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⁹⁵ As specified by Network Rail in <u>Rail served aggregates and minerals handling locations</u> (2016)

safegua	irded by the Minera	al Planning Au	thority			Plant Pe	rmitted on Sit	e	
Operator	Quarry / Transportation Facility	Site Status (2023)	End Date	Primary Processing	Bagging	Concrete / Mortar Batching	Coated Roadstone	Aggregate Recycling Facility ⁹⁴	Transhipment Facility ⁹⁵
	Wharf) Aveley, RM19 1RP								
Ingrebourne Valley	Orsett Quarry Stanford Le Hope	Inactive (mothball ed)	2042					✓ (Inactive)	
Recycled in Orsett	Dansand Quarry	Active	2025					✓	
S. Walsh &	Port of Tilbury, Berth 34	Inactive ⁹⁶	Permanent						Rail & Wharf
Sons	East Tilbury Quarry		rrently being cored					✓	
Stema Shipping	Tilbury Docks Berth 1	Active	Permanent						Wharf

⁹⁶S. Walsh & Sons Port of Tilbury, Berth 34 was expected to commence in 2021.

Appendix D: Permitted Primary & Secondary Processing Plant in Greater Essex (31 December 2023)

	s table are located arded by the Minera		Plant Permitted on Site						
Operator	Quarry / Transportation Facility	Site Status (2023)	End Date	Primary Processing	Bagging	Concrete / Mortar Batching	Coated Roadstone	Aggregate Recycling Facility ⁹⁴	Transhipment Facility ⁹⁵
Tarmac Ltd / Thurrock Sand & Gravel Ltd	Thurrock Marine Jetty/Terminal	Active	Permanent		√				Wharf
Tilbury 2	Tilbury 2 Power Station	Inactive ⁹⁷	Permanent			Yes?		√	Rail & Wharf
	TOTAL Permitted =			0	1 (1)	1	0	5 (个)	8

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⁹⁷ Tilbury 2 was expected to commence in late 2021.

Appendix E Permitted Reserves in Greater Essex (2004 to 2023)

Table A12: Permitted Reserves in Greater Essex (2004 to 2023)

Year	Permitted Sand and Gravel Reserves in Greater Essex, (Millions of Tonnes)	Year	Continued Permitted Sand and Gravel Reserves in Greater Essex, (Millions of Tonnes)
2004	54.60	2014	30.72
2005	51.00	2015	32.69
2006	50.12	2016	35.37
2007	46.68	2017	31.95
2008	39.19	2018	29.98
2009	36.71	2019	33.10
2010	37.36	2020	33.59
2011	37.01	2021	33.86
2012	35.50	2022	39.87 ⁹⁸
2013	32.88	2023	35.07

Source: Essex County Council Annual Monitoring Reports and East of England Annual Monitoring Reports

Note 1: Dormant mineral developments are not included in the calculations in this section.

Note 2: 2019 data collection impacted by furlough due to COVID-19 and therefore sales are potentially under-reported.

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⁹⁸ This is a revised figure compared to the one presented in the Replacement Essex Minerals Local Plan review 2025 to 2040, as that was based on the most up to date, but unratified data. This document updates this information to the correct value and is accurate with the EoEAWP data.

Note 3: From discussions with some operators within Greater Essex, as part of the annual aggregate survey, it is understood that the COVID recovery period in 2021 provided an opportunity for some operators to review their assets. In so doing, a number of 2021 data returns suggested a higher permitted reserves figure than had previously been expressed, within the limit of planning permissions already acquired. This has resulted in an uplift in the overall Greater Essex permitted reserves figure compared with 31 December 2020, even though no planning permissions were granted for additional sand gravel reserves within Greater Essex in 2021.

Supporting: Figure 7- Permitted Sand & Gravel Reserves in Greater Essex (2004 to 2023, page 13.

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Appendix F Apportionment & Landbank Data

Table A13: Greater Essex Annual Sand & Gravel Apportionment Figures

Year Set	Period Covered by Guidelines	Apportionment (Millions of Tonnes Per Annum)
1989	1989 to 1994	6.9Mt for Greater Essex
1994	1994 to 2003	6.2Mt for Greater Essex
2003	2001 to 2016	4.55Mtpa (Essex = 4.41Mtpa, Thurrock = 0.14Mtpa)
2009	2005 to 2020	4.45Mtpa (Essex = 4.31Mtpa, Thurrock = 0.14Mtpa)
2021	2020 onwards	Until new National and Sub-national values are adopted: 4.45Mtpa (Essex = 4.31Mtpa, Thurrock = 0.14Mtpa)

Source: East of England Aggregates Working Party, 2010 AMR

Note: The period covered by Guidelines for the current apportionment ends on 31 December 2020. It is expected that Government will be updating these guidelines once it has been evidenced through the currently live National Aggregate Survey 2024

Table A14: Annualised Landbank held in Greater Essex (2014 – 2023)

Year	Permitted Reserve in Mt (a)	Annualised Plan Provision in Mt (b)	Landbank in Years (a/b)
2014	30.72	4.45	6.90
2015	32.69	4.45	7.35
2016	35.37	4.45	7.95
2017	31.95	4.45	7.18
2018	29.98	4.45	6.74

Appendix F: Apportionment & Landbank Data

Year	Permitted Reserve in Mt (a)	Annualised Plan Provision in Mt (b)	Landbank in Years (a/b)
2019	33.10	4.45	7.44
2020	33.59	4.45	7.55
2021	33.86	4.45	7.61
2022	39.87	4.45	8.96
2023	35.07	4.45	7.88
2023 Permitted & Pending Reserve*	35.07Mt (permitted reserve) + 4.64Mt (pending reserve) = 39.71Mt*	4.45Mt	8.72*

Source: East of England Annual Monitoring Reports & Essex County Council (2024). Please note The 2022 figures are revised from the ones presented in the Replacement Essex Minerals Local Plan review 2025 to 2040, as that was based on the most up to date, but unratified data. The resulting changes have been taken into account at the same time as all other comments received during the consultation period.

Note: 2019 data collection impacted by furlough due to COVID-19 and therefore sales are potentially under-reported.

Note * This is not actual reserve as of 31st December 2023, but what would have been available if all applications in determination and/or signing of legal agreements were complete at this date.

Supporting: Figure 9: , Greater Essex Landbank (2014 to 2023), page 20.

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Greater Essex Local Aggregate Assessment 2023: Published 2024

Table A15: 10-Year Average Rolling Sales Landbank held in Greater Essex (2014 to 2023)

Year	Permitted Reserve in Mt (a)	10 year Average Rolling Sales of Sand and Gravel in Mt (b)	Landbank in Years (a/b)
2014	30.72	3.40	9.03
2015	32.69	3.33	9.81
2016	35.35	3.27	10.83
2017	31.95	3.20	9.99
2018	29.98	3.23	9.29
2019	33.10	3.26	10.14
2020	33.59	3.26	10.30
2021	33.86	3.35	10.12
2022	39.87	3.45	11.54
2023	35.07	3.44	10.19
2023 Permitted & Pending Reserve*	35.07Mt (permitted reserve) + 4.64Mt (pending reserve) = 39.71Mt*	3.44	11.54

Source: Essex County Council (2024).

Please note: The 2022 figures are revised from the ones presented in the Replacement Essex Minerals Local Plan review 2025 to 2040, as that was based on the most up to date, but unratified data. The resulting changes have been taken into account at the same time as all other comments received during the consultation period.

Note: 2019 data collection impacted by furlough due to COVID-19 and therefore sales are potentially under-reported

Appendix F: Apportionment & Landbank Data

Note * This is not actual reserve as of 31st December 2023, but what would have been available if all applications in determination and/or signing of legal agreements were complete at this date.

Supporting: Figure 9: , Greater Essex Landbank (2014 to 2023), page 20.

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Appendix G Sales Data

Table A16: Sales of Land Won Sand & Gravel within Greater Essex (2004–2023)

	Sand and Gravel Sales			. Continued			
Year	in Constant Ferror		Year	Sand and Gravel Sales in Greater Essex (Mt)			
2004	4.30		2014	4.37			
2005	4.14		2015	3.45			
2006	4.07		2016	3.40			
2007	4.09		2017	3.41			
2008	3.29		2018	3.56			
2009	2.79		2019	3.17			
2010	2.99		2020	2.96			
2011	2.80		2021	3.64			
2012	2.30		2022	3.40			
2013	3.18		2023	3.04			
Average	Annual Sales 2004 to 2023	3 (20 y	vears)	3.42 Mt			
10 Year Rol	10 Year Rolling Average Annual Sales (2014 to 2023)						
3 Year	Rolling Average Sales (202	1 to 2	023)	3.36Mt			

Source: Essex County Council Annual Monitoring Reports and East of England Aggregates Working Party Annual Monitoring Reports & Essex County Council (2024)

Note: 2019 data collection impacted by furlough due to COVID-19 and therefore sales are potentially under-reported.

Supporting: Figure 8: Greater Essex Sales of Land Won Sand & Gravel (2014 to 2023,

10 years), page 17

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Appendix H Marine-Won Minerals

Table A17: Active Landing Ports with the Potential to Serve Greater Essex (2023)

The Crown Estate Thames Region								
Landing Port (Standard Name) / Locality	AWP Area							
Dagenham	London							
Denton	London							
Erith	London							
Greenhithe	London							
Greenwich Wharves	London							
Cliffe	South East of England							
Dover	South East of England							
Gravesend	South East of England							
Isle of Grain	South East of England							
Northfleet	South East of England							
River Medway	South East of England							
Swale	South East of England							
Thurrock	East of England							
Tilbury	East of England							
lpswich Wharves	East of England							

Source: The Crown Estate: Marine Aggregates Summary of Statistics (2023).

Table A18: Marine Won Mineral Landed in Ports with The Capacity to Serve Greater Essex in Tonnes (2014 to 2023)

	London	Thurrock	Kent	Suffolk	Total
2014	5,316,369	238,331	1,771,156	57,085	7,382,941
2015	5,613,006	204,276	2,489,490	119,421	8,426,193
2016	5,898,302	263,756	2,553,793	171,083	8,886,934
2017	5,808,273	198,753	2,574,808	208,015	8,789,849
2018	5,705,675	177,047	2,421,847	194,098	8,498,667
2019	5,567,593	106,683	2,407,683	188,009	8,269,968
2020	5,012,754	205,814	1,901,014	222,088	7,341,670
2021	5,492,812	233,123	2,488,856	221,500	8,436,291
2022	4,913,808	260,874	2,7,61,438	443,773	8,379,893
2023	4,584,554	261,110	2,497,186	331,843	7,674,693
10 year % change 2014 to 2023	-13.8%	9.6%	41.0%	481.3%	8.9%
Annual % change 2021 to 2023	-6.7%	0.1%	-9.6%	-25.2%	-8.4%

Source: The Crown Estate, Summary of Statistics, 2014 - 2023

Supporting: Figure 13: Marine-Won Mineral Landed in Ports that Could Serve Greater Essex (2014 to 2023), page 29

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Appendix I Indicative Future Housing Requirements, Major Construction Projects & Local Plan Production Update

Table A19: Indicative Housing Growth as Committed to in Local Plans (April 2023)

Local Authority Area	Local Plan Requirement	Emerging Local Plan Period	Annual Requirement (OAN / SM)	Stepped Delivery of Homes	Builds to date @ April 2023	Minimum Still to Build	Of which have planning permission at April 2023	Deliverable 5 Yr Supply 2023/24 2027/28 (inc. buffer 5% or 20%)	5 Yr Supply (years)
Basildon	20,780	2022 - 2042	1,039	n/a	222	20,558	3,434	2,322	1.85
Braintree	14,320	2013 - 2033	716	n/a	6,337	7,983	6,617	5,070	5.8
Brentwood	7,752	2016 - 2033	453	300 (2016/17 - 2023/24); 400 (2024/25 - 2029/30); 984 (2031/32	1,769	5,983	1,278	3,029	7.33

Local Authority Area	Local Plan Requirement	Emerging Local Plan Period	Annual Requirement (OAN / SM)	Stepped Delivery of Homes	Builds to date @ April 2023	Minimum Still to Build	Of which have planning permission at April 2023	Deliverable 5 Yr Supply 2023/24 2027/28 (inc. buffer 5% or 20%)	5 Yr Supply (years)
				- 2032/33) -					
				SM					
Castle Point	7,100	2023 - 2043	355	n/a	235	6,865	292	n/a	n/a
Chelmsford	21,843	2013 - 2036	805	n/a	8,703	13,140	3,745	7,474	8.83
Colchester	18,400	2013 - 2033	920	n/a	9,552	8,848	4,757	4,996	5.17
Epping Forest	11,400	2011 - 2033	518	275 (2011/12 - 2021/22); 500 (2022/23- 2026/7); 980 (2027/8- 2032/3)	3,193	8,207	2,098	4,188	3.11
Harlow	9,200	2011 - 2033	418	361 (2011/12 - 2023/24);	4,629	4,571	2,700	2,179	5.02

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Local Authority Area	Local Plan Requirement	Emerging Local Plan Period	Annual Requirement (OAN / SM)	Stepped Delivery of Homes	Builds to date @ April 2023	Minimum Still to Build	Of which have planning permission at April 2023	Deliverable 5 Yr Supply 2023/24 2027/28 (inc. buffer 5% or 20%)	5 Yr Supply (years)
				501 (2024/25 - 2032/33) - OAN					
Maldon	4,650	2014 - 2029	279	n/a	2,681	1,969	2,862	1,820	6.21
Rochford	7,200	2020 - 2040	360	n/a	1,300	5,900	2,013	1,941	5.15
Tendring	11,000	2013 - 2033	550	n/a	5,871	5,129	4,373	3,717	6.44
Uttlesford	13,680	2021 - 2041	684	n/a	980	12,700	5,722	3,695	4.50
Administrat ive Essex	147,325	-	7,097		45,472	101,853	39,893	40,431	

Local Authority Area	Local Plan Requirement	Emerging Local Plan Period	Annual Requirement (OAN / SM)	Stepped Delivery of Homes	Builds to date @ April 2023	Minimum Still to Build	Of which have planning permission at April 2023	Deliverable 5 Yr Supply 2023/24 2027/28 (inc. buffer 5% or 20%)	5 Yr Supply (years)
Southend- on-Sea	23,600	2020 - 2040	1,176	n/a	1,067	22,533	4,034	n/a	n/a
Thurrock	24,200	2019 - 2040	1,181	n/a	1,543	22,657	4,755	1,280	0.91
Greater Essex	195,125 (♥)	-	9,454	-	4,082 (介)	147,043 (Ψ)	48,682	-	-

OAN: Objectively Assessed Need, SM: Standard Methodology

Source: Essex County Council (2024)

Table 20: Initial Indication of House Building Increase Due to the Proposed Standard Housing Method within Greater Essex

Local Authority	Current Standard Method	Proposed Standard Method	Potential Increase (Actual)	Potential Increase (%)	Adopted/ Emerging Plans (OAN/SM)	Proposed Method/ Emerging Plans Change	Average Annual Net additions (2020/21 2022/23)
Basildon	1,039	1,291	252	24	1,041	250	344
Braintree	813	1,098	285	35	716	382	987

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Local Authority	Current Standard Method	Proposed Standard Method	Potential Increase (Actual)	Potential Increase (%)	Adopted/ Emerging Plans (OAN/SM)	Proposed Method/ Emerging Plans Change	Average Annual Net additions (2020/21 2022/23)
Brentwood	511	691	180	35	453	238	330
Castle Point	349	685	335	96	355	330	167
Chelmsford	913	1,406	493	54	805	601	834
Colchester	1,043	1,290	247	24	920	370	828
Epping Forest	725	1,210	485	67	518	692	212
Harlow	514	648	134	26	418	230	501
Maldon	276	544	268	97	279	265	387
Rochford	356	675	319	90	360	315	433
Tendring	770	1,043	273	35	550	493	781
Uttlesford	675	9	74	11	684	65	279
Essex CC	7,985	11,330	3,345	42	7,099	4,231	6,083
		1					
Southend-on-Sea	1,173	1,372	200	17	1,176	196	386

Local Authority	Current Standard Method	Proposed Standard Method	Potential Increase (Actual)	Potential Increase (%)	Adopted/ Emerging Plans (OAN/SM)	Proposed Method/ Emerging Plans Change	Average Annual Net additions (2020/21 2022/23)
Thurrock	1,158	1,066	92	8	1,181	115	355
Greater Essex	10,316	13,768	3,452	33	9,456	4,312	6,824

Source: Essex County Council (2024)

 Table A21:
 Essex District, Borough & City Local Plan Progress)

LPA	May '23	Jun '23	Jul '23	Aug '23	Sept '23	Oct '23	Nov '23	Dec '23	Jan '24	Feb '24	Mar '24	Apr '24
Basildon		R	18 – 27/6 t	o 5/9 - comple	eted							
Braintree	A: Shared Section 1 Local Plan adopted by BDC 22/02/2021. Section 2 Local Plan adopted 25/07/2022.											
Brentwood A: 23/03/2022	Local Plan Peview currently taking place - 'Call for Sites' consultation yet to take place											
Castle Point	New Local Plan under preparation. Next formal consultation to take place May 2024 but ongoing engagement with ECC taking place											
Chelmsford A: 27/05/2020	Local Plan review currently taking place. Reg 18 consultation (Preferred Options) to take place early 2024. On track.											
Colchester A: S1 - 01/02/21 A: S2 - 04/07/22												
Epping Forest	A: Local Plan found sound and adopted by EFDC on 06/03/2023											
Harlow	A: Local Plan found sound and adopted by Harlow Council on 10/12/2020											
Maldon A: 21/07/2017	Timetable	for the New	Local Plan	under review l	by MDC – but	next consu	ltation likely to	o take place N	1ay 2024.			
Rochford	New Local	Plan under p	oreparation	n. Reg 18 consu	ıltation (Prefe	rred Option	s) to take plac	e Winter 202	3/24			
Tendring A: S1 - 26/01/21 A: S2 - 25/01/22	Local Plan	review curre	ntly taking	place. Reg 18	consultation s	scheduled V	Vinter 2023/24	1.				
Uttlesford							R18*	3/11 to 15/12	2			
Southend UA	New Local	Plan timetal	ole under r	eview. Consult	ation on a Reg	3 18 (Prefer	red Options) li	kely to take pl	ace early 2024			
Thurrock UA					Lo	ocal Plan tir	netable under	review				
S1 = North Essex Shared Section 1 Local Plan – Adopted by Braintree 22/01/21, Colchester 01/02/2021, Tendring 26/01/2021												
MIQs = Inspector's Matters, Issues and Questions for LP Examination * = TBC												

Source: Essex County Council: Spatial Planning (Nov 2023)

Table A22: Summary of Major Developments/Construction Projects within and adjacent to Greater Essex in 2023

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Bradwell B Nuclear Power Station	Energy Infrastructure	Maldon	China Generation Nuclear Power Corporation (CGN) and EDF Energy	NISP	Unknown Paused January 2021 Scheme recommencement - not defined
Norwich to Tilbury	Energy Infrastructure	Various	National Grid	NISP	DCO submission - 2025 Estimated Construction from 2027 Estimated Fully operational from early 2031
Bramford to Twinstead Connection Project	Energy Infrastructure	Various	National Grid	NISP	DCO Consent granted – September 2024 Estimated Fully operational in Autumn 2028
Sea Link ⁹⁹	Energy Infrastructure	Off-shore	National Grid	NISP	DCO submission - Autumn 2024 Construction – 2026 – 2030 Estimated Fully operational - 2030

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⁹⁹ In September 2024, the OCSS provided a joint statement noting that the consortium supports the Secretary of State's decision and will not be further pursuing a coordinated offshore connection, given the significant extra costs and the negative impact on the delivery timeline of connecting more renewables to the UK energy system, especially considering the government's commitment to quadruple offshore wind and fully decarbonise the UK's electricity system by 2030. As such, this development will not feature in the next LAA.

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Longfield Solar Farm	Energy Infrastructure	Braintree	EDF Energy	NISP	DCO granted - June 2023 Estimated Operational by 2026
Lower Thames Crossing	Transport Infrastructure	Thurrock	National Highways	NISP (DCO)	DCO decision – May 2025 ¹⁰⁰ Estimated Open to traffic -2029/30 (subject to review)
Oikos Marine and South Side	Transport Infrastructure	Castle Point	Oikos Storage Ltd	NISP	DCO Submission – 2025
M25, Junction 28	Transport Infrastructure	Brentwood	National Highways	NISP (DCO)	Construction commenced October 2022 Estimated Open to traffic - 2025
A12 Chelmsford to A120 Widening (Junctions 19 to 25)	Transport Infrastructure	Various	National Highways	NISP (DCO)	DCO granted – January 2024 ¹⁰¹ Estimated Open to traffic - 2027/28
New A120 Braintree to the A12 route	Transport Infrastructure	Various	ECC / National Highways	NISP (DCO)	Ministerial Statement moved scheme from RIS3 (2025 – 2030) to RIS4 (beyond 2030)

 $^{^{100}}$ Labour Government extended planning decision deadline from 2024 to 23 May 2025

¹⁰¹ DCO legal challenge has been dismissed and the timetable for scheme implementation is subject to review.

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
M11 Junction 8	Transport Infrastructure	Harlow	ECC	Planning Application	Construction commenced - early 2022 Completed Summer 2024 ¹⁰² .
Chelmsford North- East Bypass	Transport Infrastructure	Chelmsford	ECC	Planning Application	Permission granted – April 2022 Phase 1A – to connect with Beaulieu Parkway relief road in the south providing connectivity to the A12 at Boreham Interchange via Generals Lane Bridge – is planned to commence in early 2025 with estimated completion in Spring 2026. Phase 1B and 2 – to connect to the A131 at Chatham Green – to progress when full funding has been secured including potential developer contributions.
A120/A133 Link Road and Rapid Transit System	Transport Infrastructure	Various	ECC	Planning Application	Permission granted – November 2021 To be completed by March 2026 (with the Link Road in two phases)
Beaulieu Park Station	Transport Infrastructure	Chelmsford	ECC / Network Rail	Planning Application	Outline Permission granted – 2013 Detailed Permission granted – June 2022 Construction commenced – early 2023 Estimated Open –December 2025

¹⁰² Overall, scheme completed Summer 2024, with some 'snagging works' on-going.

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
A127/A130 Fairglen Interchange – (short term)	Transport Infrastructure		ECC	Planning Application	Permission granted – December 2019 The Compulsory Purchase Order and Side Roads Order were confirmed on 25th July 2023. A construction start date for the main works will be announced once a contractor has been appointed.
A127 Improvement Package	Transport Infrastructure	Various	ECC	Planning Application	Strategic outline business case submitted to Department for Transport – June 2024
Army and Navy Sustainable Transport Package	Transport Infrastructure	Chelmsford	ECC	Planning Application	Construction to commence – Spring 2025 Estimated Open to traffic – early 2028
Millenium Way Slips	Transport Infrastructure	Braintree	ECC	Planning Application	Permission granted – August 2020 Open to traffic - tbc
Stansted Airport	Transport Infrastructure	Uttlesford	MAG & STAL	Planning Application	Permission granted by appeal - May 2021 Implementation date — Vary and set out in the Unilateral Undertaking (dated March 2021). Dependent on passenger throughput and future need. Terminal Transformation Planning Permission reference - s62A/2023/0022 — construction expected to start Autumn 2024.

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
					Sustainable Development Plan including the Airport Surface Access Strategy published in 2015- currently under review 103
Freeport East (Harwich Bathside Bay component)	Transport Infrastructure	Tendring	Hutchinson Ports	Planning Application	Works have commenced comprising site- clearance and the preparation works for the southern road. Temporary use of the terminal platform was granted in early 2024 for a `Green Energy Hub' for a period of 15 years.
Rivenhall Integrated Waste Management Facility (IWMF) and Energy Centre development	Waste Management	Braintree	Indaver	Planning Application	DCO Examination – June 2024 Estimated Fully operational in 2025
North Falls Wind Farm	Energy Infrastructure	Off-Shore	SSE Renewables / RWE	NISP	Accepted for Examination - August 2025 Estimated Fully operational by 2030
Five Estuaries Wind Farm	Energy Infrastructure	Off-shore	Consortium led by RWE	NISP	Examination commenced September 2024 Estimated Fully operational by 2030

¹⁰³ Appeal reference - UTT/18/0460/FUL for airfield works to enable combined airfield operations of 274,000 aircraft movements (of which not more than 16,000 movements would be Cargo Air Transport Movements) and a throughput of 43 million terminal passengers, in a 12-month calendar period at London Stansted Airport.

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Sizewell C Nuclear Power Station	Energy Infrastructure	Suffolk	EDF Energy	NISP	Estimated construction to commence in 2024, taking between nine and twelve years In Adjacent Suffolk, but could source aggregate from Greater Essex The Secretary of State granted development consent for the Sizewell C Project on 20 July 2022.
London Gateway Logistics Park	Transport Infrastructure	Thurrock	DP World	Local Development Order	Expected beyond 2024
Severalls Hospital, Colchester	Major Housing Development (200+ units)	Colchester		Planning Application	2023/2024, Under construction
The Wick, Wickford	Major Housing Development (200+ units)	Basildon		Planning Application	Post 2028/2029, Under construction
Former Runwell Hospital	Major Housing Development (200+ units)	Chelmsford		Planning Application	2024/2025, Under construction

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Land Between Windmere Avenue and Lower Road Maylons Lane, Hullbridge	Major Housing Development (200+ units)	Rochford		Planning Application	2024/2025, Under construction
Flint Grange (Oakwood Park Ph1), Clacton	Major Housing Development (200+ units)	Tendring		Planning Application	2024/2025, Under construction
Various Lakeland	Major Housing Development (200+ units)	Colchester		Planning Application	2023/2024, Under construction
Station Field, Land west of Kelvedon Station Station Road (Monks Farm)	Major Housing Development (200+ units)	Braintree		Planning Application	2025/2026, Under construction
Land at Lodge Farm, Hatfield Road, Witham	Major Housing Development (200+ units)	Braintree		Planning Application	2029/2030, Under construction
Finches Park, Kirby Cross	Major Housing Development (200+ units)	Tendring		Planning Application	2026/2027, Under construction

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Land West of Woodside Way, Woodside Way, Dunmow	Major Housing Development (200+ units)	Uttlesford		Planning Application	2027/2028, Under construction
Land off Western Road, Silver End	Major Housing Development (200+ units)	Braintree		Planning Application	2027/2028, Under construction
Land At Nether Mayne, Kingswood, Basildon	Major Housing Development (200+ units)	Basildon		Planning Application	2028/2029, Under construction
Cowdray Centre, Mason Road, Colchester	Major Housing Development (200+ units)	Colchester		Planning Application	2024/2025, Under construction
Newhall Phase 2 & 3 (Now excludes Hubbards Hall Land), Harlow	Major Housing Development (200+ units)	Harlow		Planning Application	2030/2031, Under construction
Chelmsford Garden Village	Major Housing Development (200+ units)	Chelmsford		Planning Application	Post 2041, Part under construction

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Land North of London Road and South of Rawreth Lane and West Of Rawreth Industrial Estate Rawreth Lane Rayleigh	Major Housing Development (200+ units)	Rochford		Planning Application	2026/2027, Under construction
South Maldon Garden Suburb	Major Housing Development (200+ units)	Maldon		Planning Application	Post 2028/2029, Part under construction
Land off Braintree Road, Cressing	Major Housing Development (200+ units)	Braintree		Planning Application	2026/2027, Under construction
Land West of Woodside Way, Woodside Way, Dunmow	Major Housing Development (200+ units)	Uttlesford		Planning Application	2027/2028, Under construction
Towerlands, NW Braintree	Major Housing Development (200+ units)	Braintree		Planning Application	2032/33, Under construction

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Land north of Colchester Road, Coggeshall	Major Housing Development (200+ units)	Braintree		Planning Application	2027/2028, Under construction
Chesterwell, Colchester	Major Housing Development (200+ units)	Colchester		Planning Application	2032/2033, Under construction
Land To the Northwest of Henham Road, Elsenham	Major Housing Development (200+ units)	Uttlesford		Planning Application	2028/2029, Under construction
Barbrook Lane, Tiptree	Major Housing Development (200+ units)	Colchester		Planning Application	2027/2028, Under construction
North Heybridge Garden Community	Major Housing Development (200+ units)	Maldon		Planning Application	2033/2034, Part under construction
Sector 3, Woodlands Park, Great Dunmow	Major Housing Development (200+ units)	Uttlesford		Planning Application	2029/2030, Under construction

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Inworth Road Feering	Major Housing Development (200+ units)	Braintree		Planning Application	Post 2033, Part completed/Part not started
Samphire Meadow, Frinton	Major Housing Development (200+ units)	Tendring		Planning Application	2027/2028, Under construction
Central Office, Ford Motor Co Ltd Eagle Way, Great Warley, Brentwood	Major Housing Development (200+ units)	Brentwood		Planning Application	2024/2025, Under construction
Languard View, Harwich and Dovercourt	Major Housing Development (200+ units)	Tendring		Planning Application	2029/2030, Under construction
Brook Park West, Clacton	Major Housing Development (200+ units)	Tendring		Planning Application	2028/2029, Under construction
'Manningtree Park', Long Rd	Major Housing Development (200+ units)	Tendring		Planning Application	2040/2041, Under construction

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Land East of Ashingdon Road and North of Rochford, Garden Way, Rochford	Major Housing Development (200+ units)	Rochford		Planning Application	2029/2030, Under construction
Fiveways Fruit Farm, Stanway	Major Housing Development (200+ units)	Colchester		Planning Application	2032/2033, Not started
R/O Colchester Centre, Hawkins Road, Colchester	Major Housing Development (200+ units)	Colchester		Planning Application	2027/2028, Not started
Mill Road Extra Care, Land South of Axial Way, Colchester	Major Housing Development (200+ units)	Colchester		Planning Application	2036/2037, Not started
University of Essex, Colchester	Major Housing Development (200+ units)	Colchester		Planning Application	2024/2025, Not started
Land North of London Road, Stanway	Major Housing Development (200+ units)	Colchester		Planning Application	2036/2037, Not started

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Land west of Lakelands, Stanway	Major Housing Development (200+ units)	Colchester		Planning Application	2032/2033, Not started
Defence Support Group (DSG), Flagstaff Road, Colchester	Major Housing Development (200+ units)	Colchester		Planning Application	2029/2030, Not started
Land North of South Woodham Ferrers	Major Housing Development (200+ units)	Chelmsford		Planning Application	2034/2035, Not started
'Lawford Green', Bromley Road, Lawford	Major Housing Development (200+ units)	Tendring		Planning Application	2028/2029, Not started
Panfield Lane, NW Braintree	Major Housing Development (200+ units)	Braintree		Planning Application	Post 2033, Not started
Laindon Shopping Centre, Basildon	Major Housing Development (200+ units)	Basildon		Planning Application	Post 2029, Not started

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Rouses Farm, Clacton	Major Housing Development (200+ units)	Tendring		Planning Application	Post 2041, Not started
Land off Church Street/North of Grove Field, Bocking, Braintree	Major Housing Development (200+ units)	Braintree		Planning Application	2029/2030, Under construction
Land at Long Green, Cressing	Major Housing Development (200+ units)	Braintree		Planning Application	2028/2029, Under construction
Straits Mill, NE Braintree	Major Housing Development (200+ units)	Braintree		Planning Application	Post 2033, Not started
Barleyfields, Land South of Thorpe Road, Weeley	Major Housing Development (200+ units)	Tendring		Planning Application	2032/2033, Not started
Land South of Dunton Road, Dunton, Basildon	Major Housing Development (200+ units)	Basildon		Planning Application	Post 2029, Not started

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Land At Market Square Basildon	Major Housing Development (200+ units)	Basildon		Planning Application	2028/2029, Under construction
Land At Gardiners Lane South Gardiners Lane South, Basildon	Major Housing Development (200+ units)	Basildon		Planning Application	Post 2029, Not started
Great Oaks Retail Park, Basildon	Major Housing Development (200+ units)	Basildon		Planning Application	2028/2029, Under construction
North of Broomfield, Chelmsford	Major Housing Development (200+ units)	Chelmsford		Planning Application	2034/2035, Not started
Dunton Hills Garden Village	Major Housing Development (200+ units)	Brentwood		Planning Application	Post 2033, Not started
West Chelmsford	Major Housing Development (200+ units)	Chelmsford		Planning Application	2040/2041, Not started

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Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Great Leighs - Banters Field Main Road (North Section and South Section)	Major Housing Development (200+ units)	Chelmsford		Planning Application	2029/2030, Not started
Manor Farm East, Chelmsford	Major Housing Development (200+ units)	Chelmsford		Planning Application	2034/2035, Not started
Chelmsford Garden Village	Major Housing Development (200+ units)	Chelmsford		Planning Application	Post 2041 , Not started
Land at Moulsham Hall, Great Leighs	Major Housing Development (200+ units)	Chelmsford		Planning Application	2034/2035, Not started
Meadows Shopping Centre, Chelmsford	Major Housing Development (200+ units)	Chelmsford		Planning Application	2034/2035, Not started
Harwich Valley, Harwich and Dovercourt	Major Housing Development (200+ units)	Tendring		Planning Application	2032/2033, Not started

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Harvey Centre, West Gate, Market Square ,Broad Walk, Harlow	Major Housing Development (200+ units)	Harlow		Planning Application	2027/2028, Not started
Harvey Centre, West Gate, Market Square ,Broad Walk, Harlow	Major Housing Development (200+ units)	Harlow		Planning Application	2031/2032, Not started
Walpole Meadows North, East of Pennington Lane, Stansted Mountfitchet	Major Housing Development (200+ units)	Uttlesford		Planning Application	2035/2036, Not started
East Chelmsford Garden Village (Hammonds Farm)	Major Housing Development (200+ units)	Chelmsford		Planning Application	Post 2041, Not started
Middlewick Ranges, Colchester	Major Housing Development (200+ units)	Colchester		Planning Application	2037/2038, Not started
Hartley Gardens, Clacton	Major Housing Development (200+ units)	Tendring		Planning Application	Post 2041, Not started

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Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
East of Takeley	Major Housing Development (200+ units)	Uttlesford		Planning Application	2040/2041, Not started
Land East of Great Notley, Braintree	Major Housing Development (200+ units)	Braintree		Planning Application	Post 2033, Not started
Land south of Radwinter road and land south of Thaxted road, Saffron Walden	Major Housing Development (200+ units)	Uttlesford		Planning Application	2040/2041, Not started
Church End East, Great Dunmow	Major Housing Development (200+ units)	Uttlesford		Planning Application	2040/2041, Not started
Newport	Major Housing Development (200+ units)	Uttlesford		Planning Application	2040/2041, Not started
Land east of B1008, Great Dunmow	Major Housing Development (200+ units)	Uttlesford		Planning Application	2035/2036, Not started

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Rugby Club site, Mill Road, Colchester	Major Housing Development (200+ units)	Colchester		Planning Application	2032/2033, Not started
Former Gas Works, Wharf Road, Chelmsford	Major Housing Development (200+ units)	Chelmsford		Planning Application	2034/2035, Not started
Oakwood Park (Phase 2), Clacton	Major Housing Development (200+ units)	Tendring		Planning Application	2040/2041, Not started
Tendring Colchester Borders Garden Community	Major Housing Development (200+ units)	Tendring		Planning Application	Post 2041, Not started
William Hunter Way, Brentwood	Major Housing Development (200+ units)	Brentwood		Planning Application	2032/2033, Not started
Land off Doddinghurst Road, either side of A12, Brentwood	Major Housing Development (200+ units)	Brentwood		Planning Application	2025/2026, Not started

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
West Horndon Industrial Estates	Major Housing Development (200+ units)	Brentwood		Planning Application	2032/2033, Not started
Land north of Shenfield	Major Housing Development (200+ units)	Brentwood		Planning Application	2030/2031, Not started
Town Centre North (OA3 TCMP), Harlow	Major Housing Development (200+ units)	Harlow		Planning Application	2034/2035, Not started
Sainsburys Northern Gateway Site (OA1 TCMP), Harlow	Major Housing Development (200+ units)	Harlow		Planning Application	2039/2040, Not started
Wych Elm Area excluding 4,5 and 10 Wych Elm (OA2 TCMP), Harlow	Major Housing Development (200+ units)	Harlow		Planning Application	2034/2035, Not started
Sustainable Transport Hub (OA4 TCMP), Harlow	Major Housing Development (200+ units)	Harlow		Planning Application	2036/2037, Not started

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
East of Harlow	Major Housing Development (200+ units)	Harlow		Planning Application	2040/2041, Not started
Princess Alexandra Hospital, Harlow	Major Housing Development (200+ units)	Harlow		Planning Application	2036/2037, Not started
Rawreth Industrial Estate, Rayleigh	Major Housing Development (200+ units)	Rochford		Planning Application	2031/2032, Not started
TBC Scrapyard Site, Hythe Quay, Colchester	Major Housing Development (200+ units)	Colchester		Planning Application	2032/2033, Not started
Tiptree Neighbourhood Plan	Major Housing Development (200+ units)	Colchester		Planning Application	2034/2035, Not started
Land South of Epping, West	Major Housing Development (200+ units)	Epping Forest		Planning Application	2032/2033, Not started

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Land South of Epping, East	Major Housing Development (200+ units)	Epping Forest		Planning Application	2032/2033, Not started
Land West of Galley Hill Road; Waltham Abbey	Major Housing Development (200+ units)	Epping Forest		Planning Application	2032/2033, Not started
Lea Valley Nursery, Crooked Mile, Waltham Abbey	Major Housing Development (200+ units)	Epping Forest		Planning Application	2032/2033, Not started
Land West of Tylers Green, Bulmans, North Weald	Major Housing Development (200+ units)	Epping Forest		Planning Application	2032/2033, Not started
Land South of Vicarage Lane, North Weald	Major Housing Development (200+ units)	Epping Forest		Planning Application	2032/2033, Not started
West Ongar Concept Framework	Major Housing Development (200+ units)	Epping Forest		Planning Application	2032/2033, Not started

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Latten Priory, Harlow	Major Housing Development (200+ units)	Epping Forest		Planning Application	2032/2033, Not started
Water Lane, Harlow	Major Housing Development (200+ units)	Epping Forest		Planning Application	2032/2033, Not started
Ld at Smiths Farm, Chelmsford Road, Great Dunmow (West of Chelmsford Road)	Major Housing Development (200+ units)	Uttlesford		Planning Application	2035/2036, Not started
Land south of Stortford Road, Dunmow	Major Housing Development (200+ units)	Uttlesford		Planning Application	2035/2036, Not started
Helena Romanes School, Parsonage Downs, Dunmow	Major Housing Development (200+ units)	Uttlesford		Planning Application	2032/2033, Not started
Land East of Highwood Quarry, Little Easton	Major Housing Development (200+ units)	Uttlesford		Planning Application	20240/2041, Not started

Scheme	Development Type	Location	Lead Developer	Decision Pathway	Potential/Actual Delivery Date
Land South Of (East of Griffin Place) Radwinter Road Sewards End	Major Housing Development (200+ units)	Uttlesford		Planning Application	2033/2034, Not started
Land East of Station Road, Elsenham	Major Housing Development (200+ units)	Uttlesford		Planning Application	2032/2033, Not started
Wood End Farm, Hatfield Road, Witham	Major Housing Development (200+ units)	Braintree		Planning Application	2032/2033, Not started
Bournebridge Hill, Halstead	Major Housing Development (200+ units)	Braintree		Planning Application	2029/2030, Not started
Land North of London Road, Kelvedon	Major Housing Development (200+ units)	Braintree		Planning Application	2028/2029, Not started

Source: Essex County Council (2024)

Note: For the purposes of the Survey and this report, these are 'unusually large individual development projects', which are anticipated to have greater than local influence on aggregate demand. This could include Nationally Significant Infrastructure Projects (NSIPs), residential/mixed residential schemes more than 200 dwellings along with supporting infrastructure, and significant new transport infrastructure.

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Essex County Council, Minerals and Waste Planning

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