



**Hertfordshire County Council**

**Minerals Site Selection**  
**Safeguarding Methodology**  
**Paper**

**Final report**  
Prepared by LUC  
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**Hertfordshire County Council**

**Minerals Site Selection  
Safeguarding Methodology Paper**

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# Chapter 1

## Introduction

**1.1** The purpose of this document is to provide information on the methodology for the formation of the Hertfordshire Mineral Safeguarding Areas (MSAs) in support of Policy 5: Mineral Safeguarding Areas of the Hertfordshire Minerals and Waste Local Plan (the Plan).

**1.2** In 2014, LUC and Cuesta Consulting were appointed by Hertfordshire County Council to review the Council's methodology for the identification of MSAs and Minerals Consultation Areas (MCAs). This work was carried out alongside site selection work in support of the emerging Minerals Local Plan in 2018.

**1.3** The 2018 Mineral Site Selection Report reviewed the Council's previous mineral site selection methodology, amending and updating it where required, and then applied the methodology to identify suitable sites for the extraction of sand and gravel and brick clay in the county.

**1.4** In December 2021, the Council formally withdrew the emerging Minerals Local Plan, alongside the emerging Waste Local Plan, and agreed to bring the work on those documents together into a single Minerals and Waste Local Plan.

**1.5** In 2023, the Mineral Sites Selection Report was reviewed to provide up-to-date evidence in support of the new Minerals and Waste Local Plan. The new report is available on the council's website (<http://hertfordshire.gov.uk/mwlp>).

**1.6** The updated evidence relating to mineral safeguarding has not been included in the new Minerals Sites Selection Report (2023) and is instead summarised in this standalone document.

## Chapter 2

# Mineral safeguarding policy and guidance

**2.1** Mineral Safeguarding Areas (MSAs) and Mineral Consultation Areas (MCAs) are complementary aspects of ensuring that important mineral resources remain available for use by future generations, rather than being needlessly 'sterilised' (rendered unavailable for extraction) by other forms of development.

**2.2** The reasoning behind this, as noted in paragraph 2.3.1 of the British Geological Survey (BGS) report 'Mineral safeguarding in England: good practice advice' is that mineral resources are finite and can only be worked where they naturally occur.

**2.3** Safeguarding of selected mineral resources also helps to ensure that the planning system retains the flexibility to identify potential areas for future extraction which would have the least impact on the environment, if they were ever worked, whilst not creating a presumption that such working will necessarily occur.

### National policy and guidance

**2.4** Paragraph 210 of the National Planning Policy Framework (NPPF) sets out the requirement for Mineral Planning Authorities (MPAs) to ensure that their Local Plans define MSAs and MCAs and adopt appropriate policies in order that known locations of specific minerals resources are not needlessly sterilised by non-mineral development, whilst not creating a presumption that resources defined will be worked. In addition to mineral resources, Local Plans should safeguard existing, planned and potential facilities for the bulk transport, handling and processing of minerals including substitute, recycled and secondary aggregate material<sup>1</sup>; and set out policies to encourage the prior extraction of minerals, where practicable and environmentally feasible, if it is necessary for non-mineral development to take place.

**2.5** National Planning Practice Guidance (PPG) and the British Geological Survey report 'Mineral safeguarding in England: good practice advice' provides guidance on minerals safeguarding, including the steps MPAs should take to safeguard mineral resources, and what the role is of the district council, as the local planning authority, in safeguarding minerals.

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<sup>1</sup> In the case of Hertfordshire, this means that existing and disused railheads, such as the five rail depots which transport mineral throughout the county and beyond, should be safeguarded.

**2.6** Both MSAs and MCAs are defined in the paragraph 003 in the PPG:

- **Minerals Safeguarding Area** – an area designated by a MPA which covers known deposits of minerals which are desired to be kept safeguarded from unnecessary sterilisation by non-mineral development.
- **Minerals Consultation Area** – a geographical area, based on a Mineral Safeguarding Area, where the district or borough council should consult the MPA for any proposals for non-minerals development.

**2.7** MSAs are the means by which the resource outcrops affected by mineral safeguarding policies are meant to be identified in Minerals Local Plans; whereas MCAs are intended to show the areas within which local district councils (in two-tier authorities) should consult with the MPAs on relevant development proposals (proposals that fall into this category are defined through policy). Whilst MSA and MCA boundaries can be coincident, they need not be: MSAs will usually cover the whole of a particular resource outcrop (unless that outcrop is very extensive and largely unconstrained, in which case only certain parts of it might need to be safeguarded); whereas MCAs may:

- extend beyond the minerals resource to incorporate a 'buffer' beyond the outcrop boundary, to protect the resource from sterilisation by proximal development;
- exclude areas of the MSA that have already been sterilised e.g. residential areas and therefore do not require consultation; and/or,
- exclude certain types of development that would not normally bring about the sterilisation of a resource through use of an exceptions policy. Such development would include householder extension or advertisement applications for example.

**2.8** Paragraph 003<sup>2</sup> of the PPG states that MPAs should adopt a systematic approach for safeguarding mineral resources, which:

- uses the best available information on the location of all mineral resources in the authority area. This may include use of British Geological Survey maps as well as industry sources;
- consults with the minerals industry, other local authorities (especially district authorities in two-tier areas), local communities and other relevant interested parties to define MSAs;

- sets out MSAs on the policies map that accompanies the local plan and defines MCAs; and
- adopts clear development management policies.

**2.9** The PPG (paragraph 005) also outlines the important role district councils have in safeguarding minerals, for example, having regard to the minerals local plan when identifying suitable areas for non-mineral development in their local plans, and showing MSAs on their policy maps.

### Local policy and guidance in relation to minerals safeguarding

**2.10** HCC already has an adopted Supplementary Planning Document (SPD) relating to MCAs, which was updated as part of the Minerals Local Plan Review and will be consolidated into the Minerals and Waste Local Plan. Whilst the current SPD identifies MCAs as a statutory consultation mechanism, it does not explicitly identify MSAs, as required by the NPPF. The difference may appear to be a subtle one (since MCAs are now required to be based on MSAs), but it is nevertheless important because MCAs alone do not explicitly safeguard the resources.

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<sup>2</sup> Paragraph: 003 Reference ID: 27-003-20140306, Revision date: 06 03 2014

## Chapter 3

# Methodology

### Brick clay and sand and gravel

**3.1** The basic procedures for minerals safeguarding are set out in the BGS guidance.<sup>3</sup> This is explicitly referenced in the online Planning Practice Guidance (PPG) (most recently revised in March 2014) and is therefore embedded within national policy.

**3.2** The procedures comprise the following sequential steps:

- Step 1: Identify the best geological and mineral resource information.
- Step 2: Decide which mineral resources to safeguard and the physical extent of Mineral Safeguarding Areas (MSAs).
- Step 3: Undertake Consultation on MSAs.
- Step 4: Decide on the approach to safeguarding in the Local Plan.
- Step 5: Include Development Management Policies in the Local Plan.
- Step 6: Include safeguarding in District-level Local Plans.
- Step 7: Include mineral assessments in the local list of information requirements.

**3.3** Step 1 comprised the British Geological Survey (BGS) digital resource information together with relevant material (including borehole data) from the Industrial Mineral Assessment Unit (IMAU) reports and any other readily available information which was able to be used to refine the BGS maps, following the advice set out in section 4.1 of the BGS guidance. In practice, this primarily involved excluding areas of resource which have already been worked.

**3.4** The starting point for Step 2 was that the MSAs should cover only sand and gravel and brick clay resources. The physical extent of those resources has been based on the detailed information identified in Step 1. In accordance with paragraphs 4.2.9 to 4.2.11 of the BGS guidance, the MSAs cover the whole of the mapped resource areas and do not exclude areas which are already subject to other designations or those which are already sterilised by existing urban

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<sup>3</sup> Mineral Safeguarding in England: Good Practice Advice. Wrighton et. al., 2011.

development. Rather, they are defined purely by the physical boundaries of the resources (including areas concealed beneath overburden, where this is shallow enough to permit economic extraction of the mineral) together with a suggested 'buffer' of 100 metres (constituting the Mineral Consultation Areas).

**3.5** The Step 3 consultation formed part of the public consultation alongside the Draft Minerals Local Plan in 2017. The methodology for sand and gravel, and clay, as with all supporting documentation, formed part of the Regulation 18 consultation on the draft Minerals and Waste Local Plan, held in late 2022, in order to give the public further opportunity to comment on the continuing validity of this approach.

**3.6** Steps 4 to 7 of the PPG procedures are outside the scope of this document and will be considered in the Minerals and Waste Local Plan, district and borough local plans, and any relevant validation lists for the determination of planning applications. Policy 4: Site Safeguarding and Consultation Areas, Policy 5: Mineral Safeguarding Areas and Appendix 3: Safeguarding of Minerals and Waste Infrastructure and Resources of the Draft Plan, set out the approach to safeguarding in the Plan (both for MSAs and minerals related development).

## Chalk

**3.7** The scale of working for chalk has historically been relatively small and there is little to no demand for it to support industrial use. Chalk has been quarried in the past at a number of sites to the north and west of the county, for use as an agricultural lime on farms. Currently, there is only one chalk working in the county, at Bedwell, and this is used for agricultural purposes.

**3.8** Paragraph 214 (c) of the NPPF states that minerals planning authorities should plan for a steady and adequate supply of industrial minerals by maintaining a stock of permitted reserves to support the level of actual and proposed investment required for new or existing plant, and the maintenance and improvement of existing plant and equipment. This paragraph is supported by a footnote which states:

- These reserves should be at least 10 years for individual silica sand sites; at least 15 years for cement primary (chalk and limestone) and secondary (clay and shale) materials to maintain an existing plant, and for silica sand sites where significant new capital is required; and at least 25 years for brick clay, and for cement primary and secondary materials to support a new kiln.

**3.9** There are no national policy requirements to maintain a supply of permitted reserves because chalk previously extracted in Hertfordshire was not used as an industrial

mineral. Owing to the low use and unlikely requirement for further chalk supply in the country, no MSAs or MCAs were identified for chalk resources within the original 2018 Site Selection Report.

**3.10** Whilst demand for chalk is low, the council wants to ensure that future opportunities to extract chalk remain available and that areas of resource are not needlessly sterilised where there may be opportunity to extract (coupled with where there is a demand for the resource). Chalk MSAs will introduce a consultation procedure and allow the council to gain an understanding of where chalk resource is being sterilised.

**3.11** Identifying Chalk MSAs also ensures completeness in the approach to mineral safeguarding within the Minerals and Waste Local Plan. Although the county has no remaining infrastructure to support the production of bricks, Brick Clay MSAs have been included within the plan to identify the existence of the resource and provide protection in instances where the resource may need to be preserved or extracted in the future.

**3.12** By identifying Chalk MSAs, the Plan will provide a complete picture of the mineral resources in the county and provide protection to the chalk resource, which in turn will help to support and potentially facilitate the supply of chalk for use as an industrial mineral, should the demand arise in the future.



## Chapter 4

# Proposed Mineral Safeguarding Areas and Mineral Consultation Areas

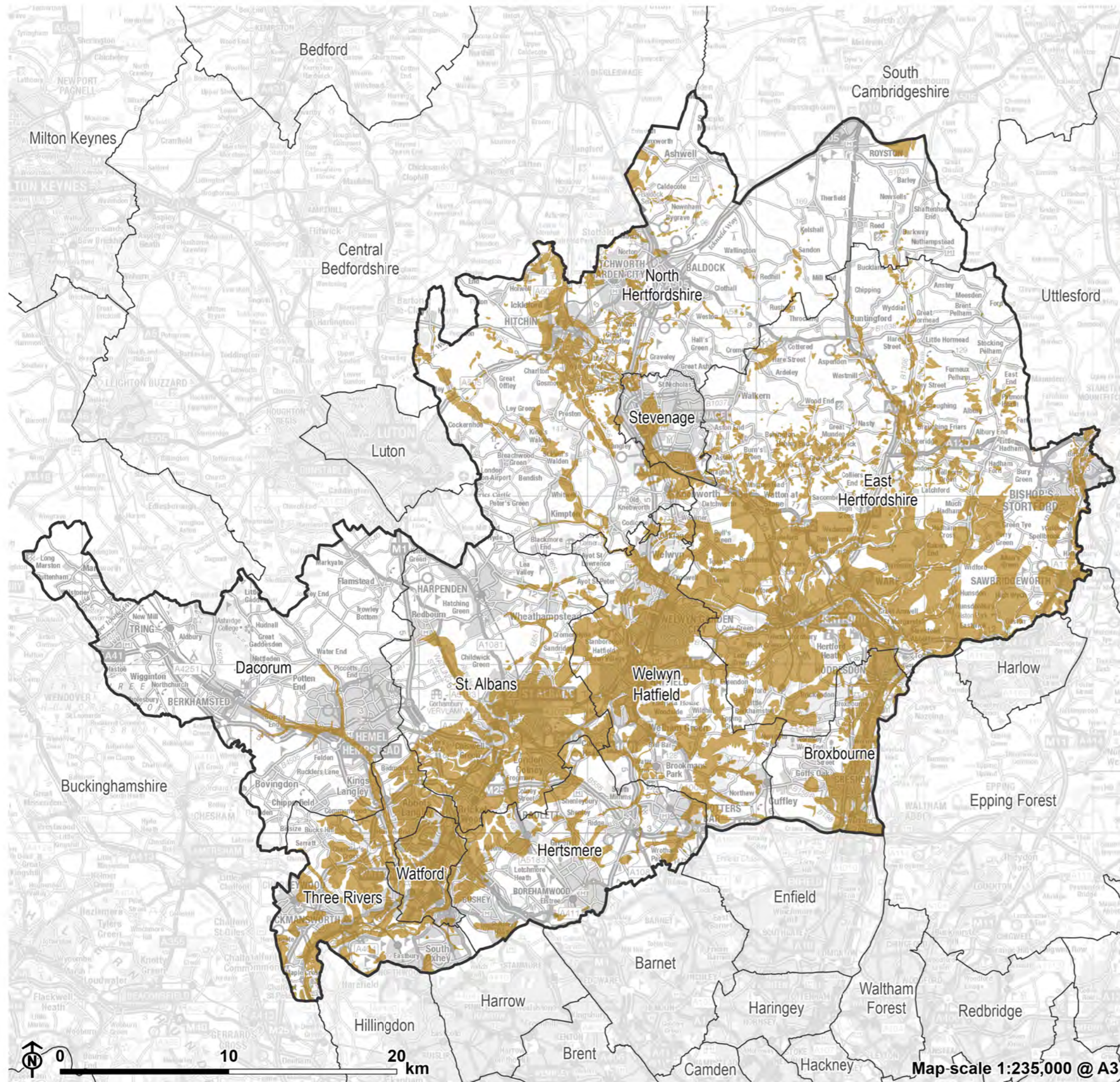
**4.1** The below figures have been prepared using British Geological Survey (BGS) mineral data for both brick clay, sand and gravel and chalk mineral resources.

**4.2** The maps show the proposed Minerals Safeguarding Areas (MSA). These MSAs (and the data supporting them), incorporate a 100m buffer zone surrounding the resource (thereby constituting the Mineral Consultation Area), and are also shown on the Policies Map for the Proposed Submission Minerals and Waste Plan.

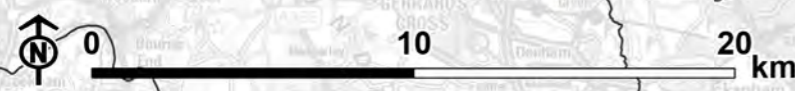
**4.3** **Figure 4.1** shows the extent of the sand and gravel resource within Hertfordshire and **Figure 4.2** shows the proposed MSA for sand and gravel. **Figure 4.3** shows the brick clay resource within Hertfordshire and **Figure 4.4** shows the proposed MSA for brick clay. **Figure 4.5** shows the chalk resource within Hertfordshire and **Figure 4.6** shows the proposed MSA for chalk. Note that the proposed Mineral Consultation Areas (MCAs) are the same as the MSAs shown in **Figure 4.2**, **Figure 4.4** and **Figure 4.6**.



Figure 4.1: Sand and Gravel Resources in Hertfordshire



- County boundary
- District boundary
- \* Sand and gravel resources



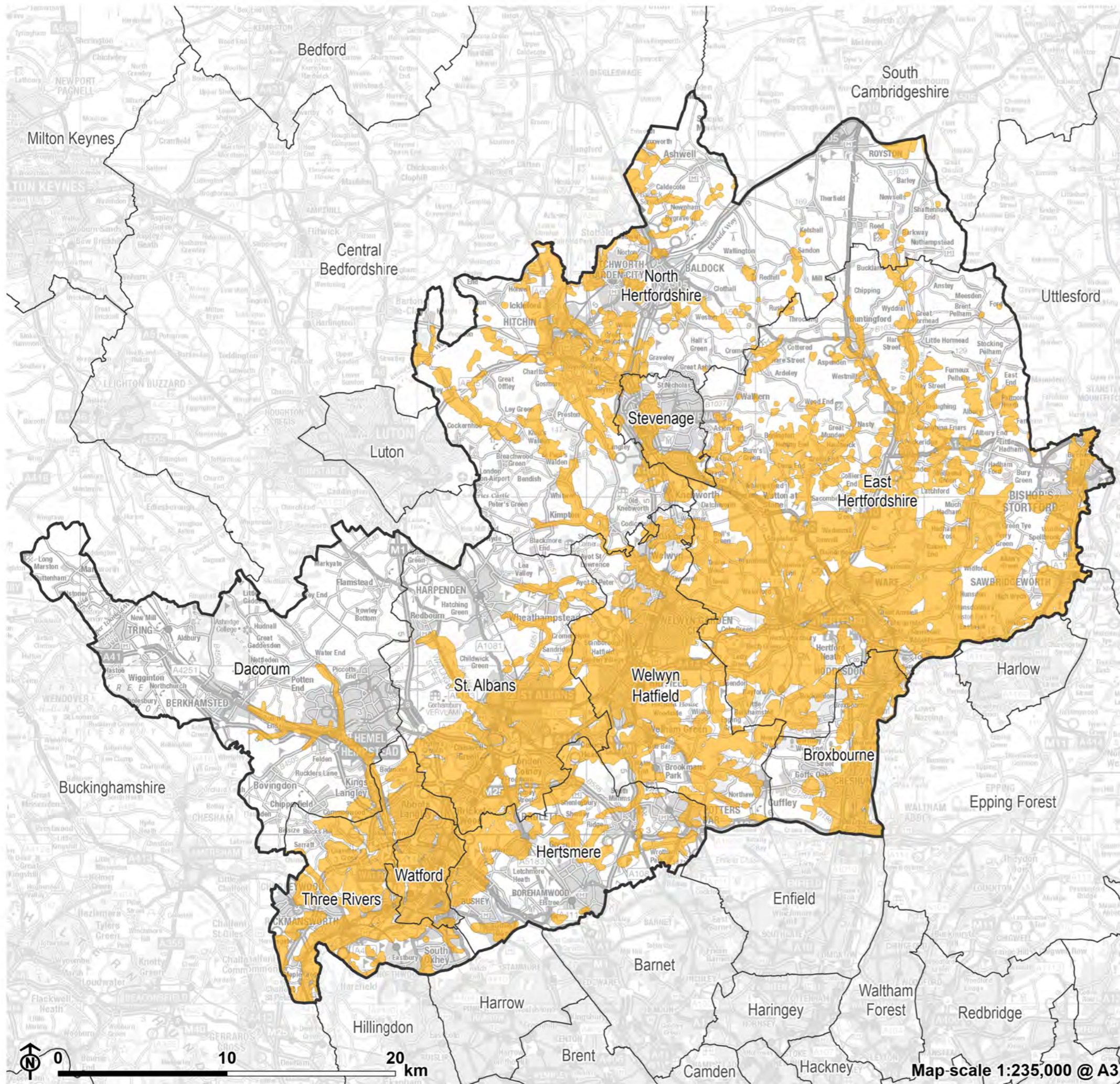
Map-scale 1:235,000 @ A3

\* Derived from 1:50,000 scale BGS digital data under Licence 2000/035C, British Geological Survey © NERC





**Figure 4.2: Proposed Mineral Safeguarding Areas for Sand and Gravel Resources in Hertfordshire**



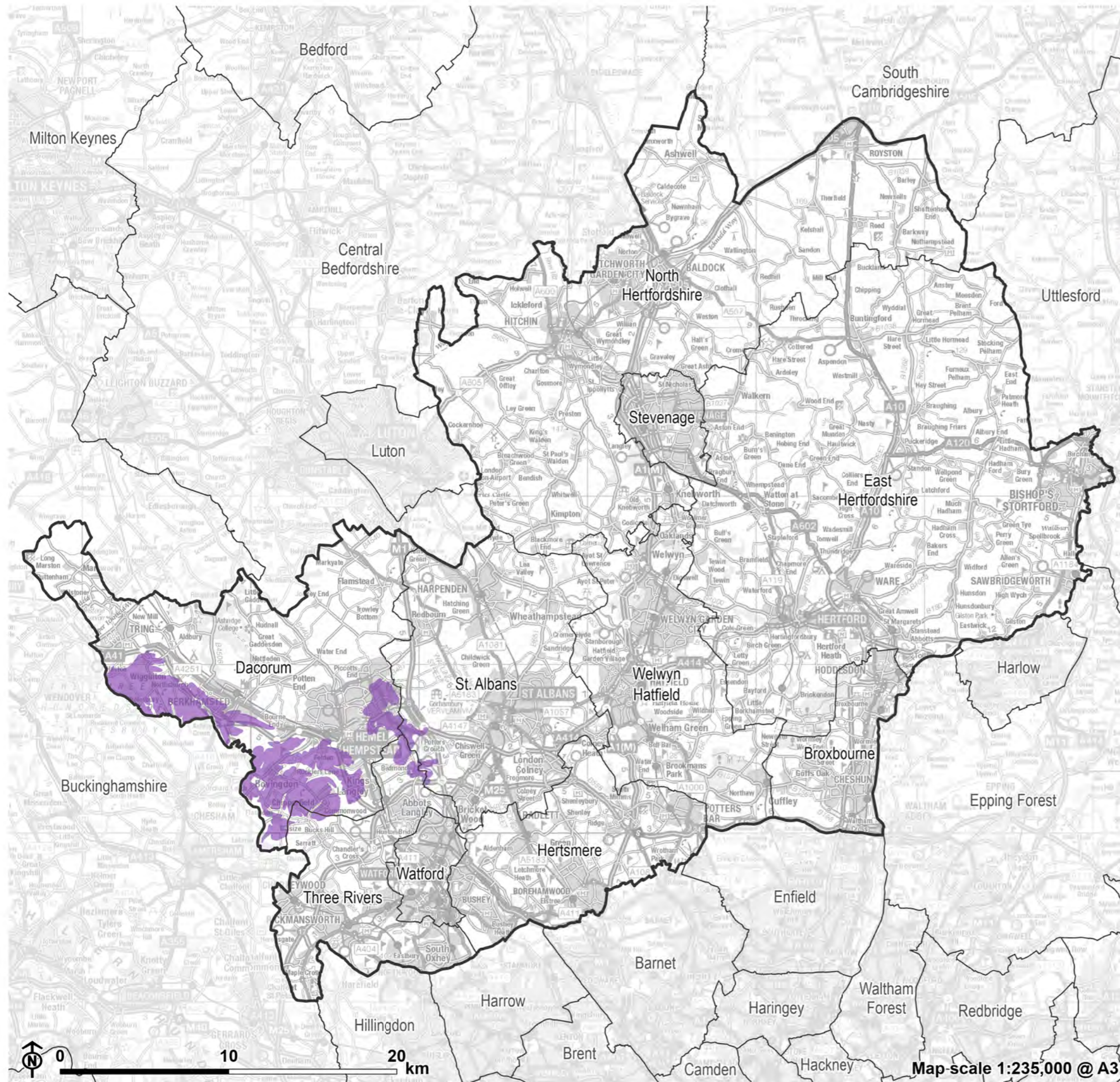
- County boundary
- District boundary
- \* Proposed Mineral Safeguarding Area (sand and gravel with 100m buffer)

\* Derived from 1:50,000 scale BGS digital data under Licence 2000/035C, British Geological Survey © NERC





Figure 4.3: Brick Clay Resources in Hertfordshire



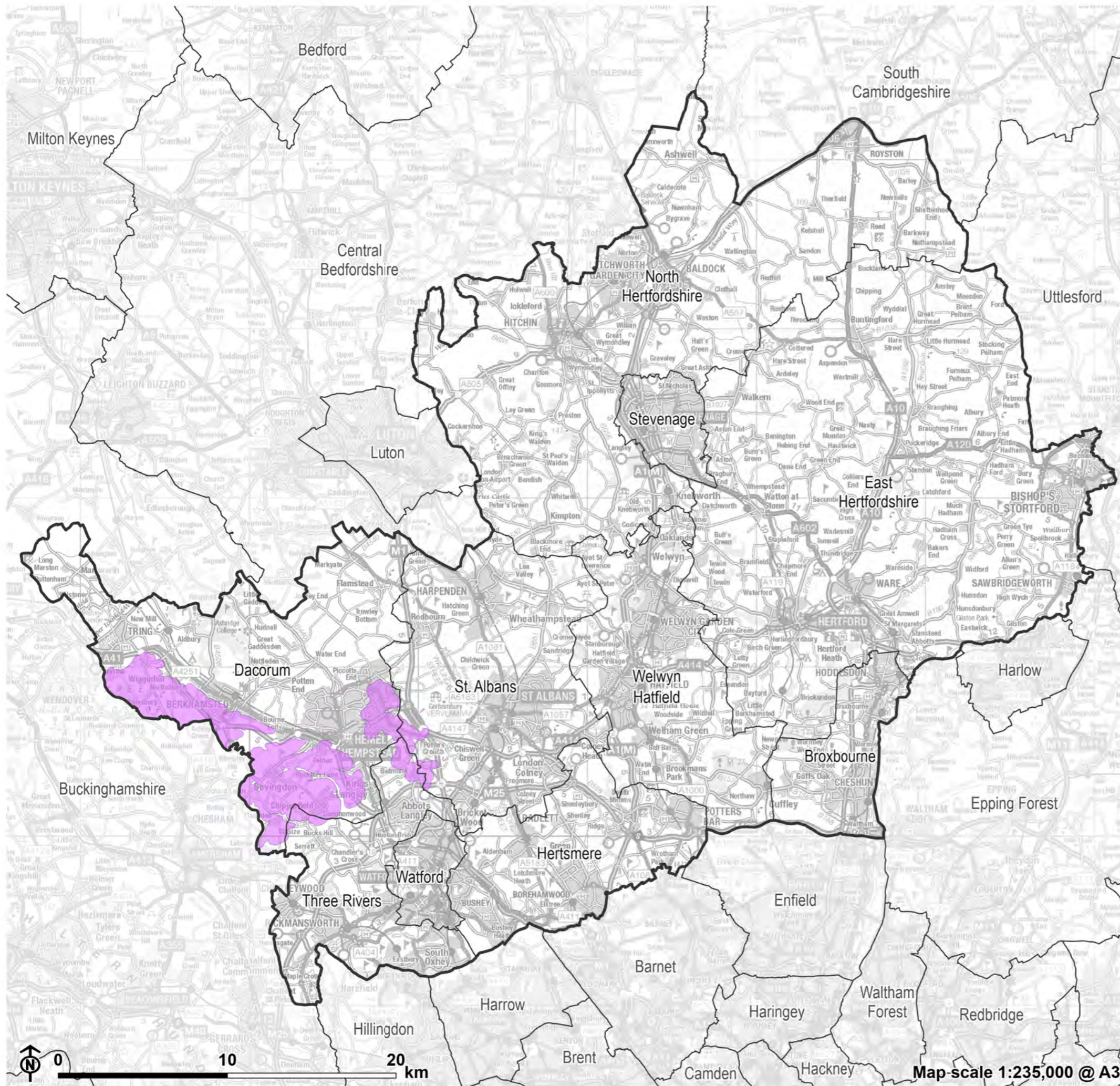
- County boundary
- District boundary
- \* Brick clay resources

\* Derived from 1:50,000 scale BGS digital data under Licence 2000/035C, British Geological Survey © NERC





**Figure 4.4: Proposed Mineral Safeguarding Areas for Brick Clay Resources in Hertfordshire**

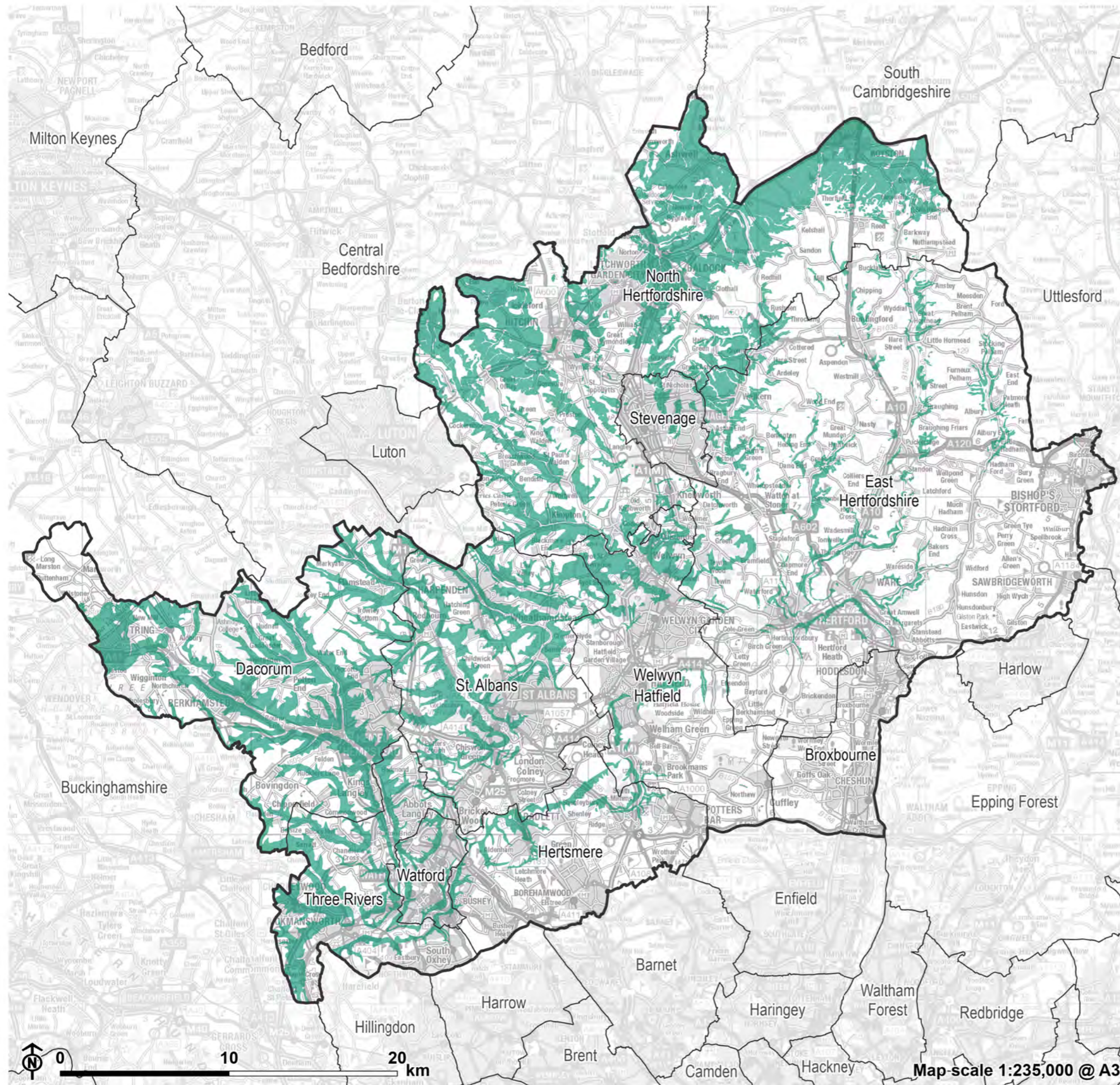


- County boundary
- District boundary
- \* Proposed Mineral Safeguarding Area (brick clay with 100m buffer)

\* Derived from 1:50,000 scale BGS digital data under Licence 2000/035C, British Geological Survey © NERC



Figure 4.5: Chalk Resources in Hertfordshire

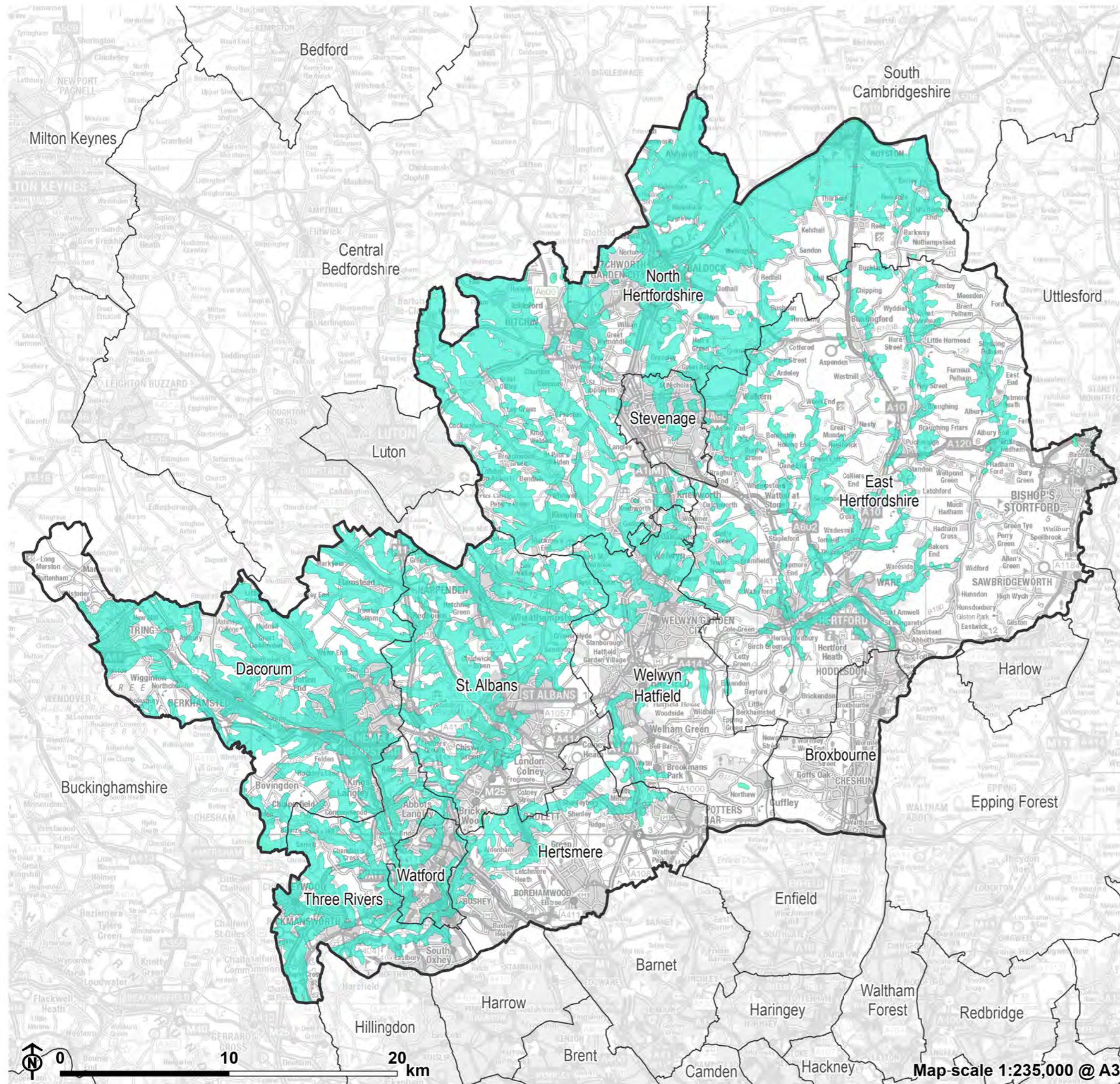


- County boundary
- District boundary
- \* Chalk resources

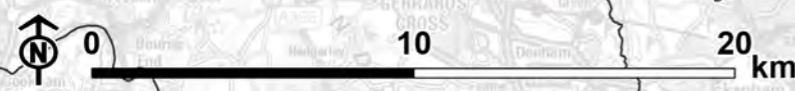
\* Derived from 1:50,000 scale BGS digital data under Licence 2000/035C, British Geological Survey © NERC



**Figure 4.6: Proposed Mineral Safeguarding Areas for Chalk Resources in Hertfordshire**



- County boundary
- District boundary
- \* Proposed Mineral Safeguarding Area (chalk with 100m buffer)



Map-scale 1:235,000 @ A3

\* Derived from 1:50,000 scale BGS digital data under Licence 2000/035C, British Geological Survey © NERC

