

Planning Stage – Stodmarsh Nutrient Mitigation Strategy

New Dwelling Adjacent to Southside, Lees Road, Brabourne Lees

This statement has been prepared to support a planning application for the development of a single dwelling within a former piece of domestic garden.

This statement has been prepared having regard to the requirements of the Town & Country Planning (Development Management Procedure) (England) Order 2015 and the current suite of UK Building Regulations.

This statement has been prepared by Alex Richards BArch (hons) MArch RIAS RIBA. Alex is a chartered architect and competent professional, recognised by the RIBA as suitable to fulfil the role of Principal Designer under the Building Safety Act for both regular and high-risk buildings.

This Nutrient Mitigation Strategy has been prepared in support of a planning application for a single new build dwelling at Brabourne Lees, Ashford, Kent. The site lies within the Stodmarsh catchment, where increased nutrient (nitrogen and phosphorus) loading to protected habitats must be avoided in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended).

The purpose of this strategy is to demonstrate that the proposed development will achieve nutrient neutrality through the identification and upgrading of existing local septic tank systems, resulting in a net reduction in nutrient loading that exceeds the additional load generated by the new dwelling.

Stodmarsh is designated as a Special Protection Area (SPA), Special Area of Conservation (SAC), Ramsar site and Site of Special Scientific Interest (SSSI). Natural England has advised that development within the catchment must not result in an increase in nutrients entering the protected water environment. Local planning authorities therefore require development proposals to:

- Quantify nutrient generation from new development; and
- Secure appropriate mitigation to ensure no adverse effect on the integrity of the Stodmarsh designated sites.

The proposal comprises:

- One new residential dwelling (Use Class C3);
- Typical domestic occupation assumed at 2.4 persons;
- Foul drainage for the new dwelling to be via a package treatment plant or equivalent system meeting current Environment Agency standards (details to be confirmed by condition).

Surface water drainage will be managed separately and will not contribute to nutrient loading.

Based on current Natural England nutrient calculator methodology:

- The proposed dwelling will generate a small but measurable increase in nitrogen and phosphorus loading as a result of residential occupation.
- Even where a modern treatment plant is used, a residual nutrient output remains.

This strategy therefore relies on off-site mitigation within the local catchment, achieved by upgrading existing septic tank systems that currently discharge untreated or poorly treated effluent.

The mitigation strategy is to:

1. Identify existing septic tanks within the local area of Brabourne Lees that:
 - Discharge to ground or watercourses within the Stodmarsh catchment; and
 - Are of an older or non-compliant design with relatively high nutrient outputs.
2. Upgrade or replace these systems with modern, high-efficiency package treatment plants that significantly reduce nitrogen and phosphorus emissions.
3. Secure the upgrades through a legal agreement or planning obligation, ensuring that the mitigation is delivered prior to occupation of the new dwelling and retained in perpetuity.

A survey has been undertaken to identify suitable septic tanks for upgrade, two have been secured which meet the following criteria:

- Residential properties in close proximity to the application site;
- Systems known or likely to pre-date current Building Regulations and Environment Agency standards;
- Willing landowners who agree to the upgrade and long-term maintenance of improved systems.

Each identified septic tank will be assessed for:

- Current treatment performance;
- Discharge location;

- Estimated nutrient output using accepted calculation methodologies.

The identified septic tank(s) will be upgraded by:

- Removal or decommissioning of the existing septic tank; and
- Installation of a modern package sewage treatment plant designed to:
 - Achieve high levels of nitrogen and phosphorus removal;
 - Comply with the General Binding Rules and relevant British Standards;
 - Discharge to ground or watercourse at a substantially reduced nutrient concentration.

Where appropriate, additional measures such as polishing filters or enhanced drainage fields may be incorporated to further reduce nutrient loading.

The upgrade of an existing septic tank to a modern treatment plant will result in:

- A significant reduction in nutrient discharge compared to the baseline situation;
- A net nutrient saving that exceeds the nutrient increase generated by the proposed new dwelling.

The calculated nutrient reduction will be quantified using the same methodology as applied to the new development, ensuring a robust like-for-like comparison.

The mitigation will be secured by:

- A Section 106 agreement or equivalent legal mechanism;
- A requirement that the septic tank upgrade is completed prior to first occupation of the new dwelling;
- Long-term maintenance obligations placed on the owner of the upgraded system.

Evidence of installation, commissioning and ongoing maintenance will be provided to the Local Planning Authority as required.

This Stodmarsh Mitigation Strategy demonstrates that the proposed single dwelling at Brabourne Lees can be delivered without adverse effects on the Stodmarsh designated sites.

By identifying and upgrading existing local septic tanks within the catchment, the development will:

- Deliver a measurable and permanent reduction in nutrient loading;
- Achieve nutrient neutrality in accordance with Natural England guidance; and
- Comply with relevant planning policy and environmental regulations.

The strategy provides a clear, deliverable and enforceable solution that ensures the long-term protection of the Stodmarsh habitats.

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