

CALCULATION FOR NUTRIENT NEUTRALITY

relating to

**PROPOSED END OF TERRACE TWO STOREY
THREE BEDROOM DWELLING
AS APPROVED UNDER PLANNING PERMISSION
REF: APP/19/00870 DATED 06/12/2019**

adjacent to

**56 KINGS ROAD, HAYLING ISLAND
HAMPSHIRE PO11 0PD**

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Jeffrey Douglas Chartered Architect
60a Sinah Lane, Hayling Island
Hampshire PO11 0HH
Tel: 02392 468889
Email: jd@jeffreydouglas.co.uk



Jeffrey Douglas Chartered Architect



CALCULATION FOR NUTRIENT NEUTRALITY

To be read in conjunction with the Water Use Calculation

This calculation of nitrogen load arising from the proposed development uses the methodology contained in Section 4 of '*Advice on Achieving Nutrient Neutrality for New Development in the Solent Region*'.

Additional population per dwelling based on average figures provided by the Office for National Statistics = 2.4 persons

Maximum water use per person = 110 litres/day

WwTW average figure Nitrogen Effluent Levels for Solent Area = 27/mg/l

Calculate Total Nitrogen:

Wastewater volume generated by one dwelling = $2.4 \times 110 = 264$ l/day

Receiving WwTW environmental permit limit for TN = 9.0 mg/l TN

TN discharged after WwTW treatment at 90% of consent limit = $264 \times 8.1 = 2138.4$ mg/TN/day

Convert mg/TN/day to kg/TN/year = $\frac{2138.4 \times 365}{1,000,000} = 0.7805$ kg/TN/yr

No adjustments for land use change is applicable in this case

Identify Nitrogen Load with 20% buffer = $0.7805 \times 120\% = \mathbf{0.936 \text{ kg/N/yr}}$