

Land South of Mortimers Lane, Fair Oak

Briefing Note: Nutrient Neutrality

edp7852_r025a

QA: MNe/WGa_NHa/FMi_100725

1 INTRODUCTION

- 1.1 This Briefing Note has been prepared by The Environmental Dimension Partnership Ltd (EDP) on behalf of Bloor Homes Limited (hereafter referred to as 'the Applicant'). This Briefing Note how the development proposals at Land South of Mortimers Lane, Fair Oak (hereafter referred to as 'the Site') can achieve nutrient neutrality.

2 NUTRIENT BUDGETS

Nitrates

- 2.1 The nitrogen nutrient budget for the Site has been calculated using 'Natural England's Nutrient Neutrality Budget Calculator' for the Solent Marine Sites. The full calculations are submitted alongside the Briefing Note (report reference: edp7852_r017.xlsx). **Table EDP 2.1** summarises the nutrient budget calculations.

Table EDP 2.1: Total Nitrate Budget Calculations

Total Nutrient Budget Calculations	
Description of Values Generated	Values Generated
Wastewater TN load (kg TN/year):	170.10
Net land use TN change (kg TN/year):	-105.98
TN budget:	64.12
Annual Nutrient Budget	
The total annual nitrogen load to mitigate is (kg TN/yr):	64.12
Pre-2030 Nutrient Budget	
The total annual nitrogen load to mitigate is (kg TN/yr):	465.24

- 2.2 Based on the development delivering up to 245 units, the development will generate approximately 51.26kg per year of additional nitrogen. The pre-2030 nutrient budget is **465.24.9kg TN/yr** and represents the total amount of nutrient mitigation required before the changing permit date for Chickenhall Wastewater Treatment Works (WwTW).
- 2.3 For the purposes of these early indicative calculations, the calculations have been completed on the basis that 20% precautionary buffer is not required. It should be noted that this budget assumes full occupancy by 2030 which is considered highly unlikely, and so these calculations are already considered highly precautionary. It is anticipated that the build out rate for this development will be 30 units in the first year (2028), and then 60 units in subsequent years, with full occupation reasonably expected to be after 2030.
- 2.4 Consultation with Eastleigh Borough Council (EBC) has identified that nutrient credits are available for purchase through the EBC 'nutrient offset scheme' and are specifically available for purchase within the Fair Oak area. Moreover, a number of credit schemes are available within the local area, such that credits could be secured from multiple sources as required (see **Appendix EDP 1**). The total amount of nitrogen to offset will be calculated at the detailed reserved matters stage, at which point the Nutrient Mitigation Strategy will be agreed.
- 2.5 The proposals also have the capacity to further reduce nutrient loading through Sustainable urban Drainage Systems (SuDS). At this stage however, the calculations do not consider SuDS measures. The capacity for the SuDS network to remove nutrients will be fully considered at the detailed design stage, once the drainage designs are defined.
- 2.6 Any such on-site and off-site measures will be detailed within a Nutrient Mitigation Strategy which can be secured via Condition, such that no likely significant effects on Solent sites are anticipated.

Phosphates

- 2.7 The Site is located outside the River Itchen catchment, and as such, significant impacts from increased phosphate loading on the River Itchen are not anticipated. Nonetheless, to assist with ongoing discussions and in light of consultation feedback, a phosphate budget has been calculated.
- 2.8 The calculations below are provided without prejudice to any final agreed position. Should phosphate mitigation ultimately be deemed necessary by the competent authority, appropriate measures can be secured to ensure compliance with relevant requirements. It's considered that any potential phosphate impacts can be addressed proportionately and without prejudging the outcome of further consultation or site-specific assessments.
- 2.9 The phosphate nutrient budget for the Site has also been calculated using the 'Natural England River Itchen Special Area of Conservation (SAC): nutrient neutrality calculator' which is submitted alongside this Briefing Note (report reference: edp7852_r024.xlsx). **Table EDP 2.2** summarises the nutrient budget calculations.

Table EDP 2.2: Total Phosphate Budget Calculations

Total Nutrient Budget Calculations	
Description of Values Generated	Values Generated
Wastewater TP load (kg TP/year):	5.32
Net land use TN change (kg TP/year):	0.00
P budget (kg TP/year):	5.32
Annual Nutrient Budget	
The total annual phosphorus load to mitigate is (kg TP/yr):	6.38
Pre-2030 Nutrient Budget	
The total annual phosphorus load to mitigate is (kg TP/yr):	12.25

- 2.10 Based on the development delivering up to 245 units, the development will generate approximately 8.78 per year of additional phosphorus. The pre-2030 nutrient budget is **12.25kg TP/yr** and represents the total amount of nutrient mitigation required before the changing permit date for Chickenhall WwTW. As the Site falls outside the River Itchen Catchment, land use has not been considered within these calculations.
- 2.11 Again, the proposals also have the capacity to further reduce nutrient loading through SuDS. At this stage however, the calculations do not consider SuDS measures. The capacity for the SuDS network to remove nutrients will be fully considered at the detailed design stage, once the drainage designs are defined.
- 2.12 As for nitrate, the calculations have been completed on the basis that 20% precautionary buffer is not required. It should be noted that this budget assumes full that occupancy by 2030 which is considered highly unlikely, and so these calculations are already considered highly precautionary. It is anticipated that the build out rate for this development will be 30 units in the first year (2028), and then 60 units in subsequent years, with full occupation reasonably expected to be after 2030.
- 2.13 EBC offers phosphate mitigation through their nutrient off-set scheme. It is understood that that Natural England have raised concerns with EBCs approach to phosphate mitigation, such that the EBC off-set scheme may not currently be viable. Alternatively, a number of other schemes are available within the River Itchen catchment area, as outlined by the Partnership for South Hampshire's Nutrient Mitigation Suppliers (Operational) – April 2025 Note, included at **Appendix EDP 1**.

3 SUMMARY AND CONCLUSION

- 3.1 The proposed development is capable of achieving nutrient neutrality in relation to both nitrates and phosphates, subject to the securing of appropriate nutrient credits and where appropriate, on-site measures.

- 3.2 Suitably worded planning conditions can ensure that the required mitigation is delivered, thereby safeguarding the integrity of the Solent European sites and the River Itchen SAC from adverse effects arising from increased nutrient loading.

Appendix EDP 1

Nutrient Mitigation Suppliers (Operational) – April 2025



Potential nutrient mitigation schemes April 2025

1. Chilgrove Farm	
Which river basin catchment the scheme serves	Chichester Harbour Fluvial, River Lavant
Which WWTWs the scheme serves	Apuldram, Thornham and Bosham
Contact details for the scheme	Andrew Thomas Henry Adams Rural and Farming Tel: 01243 215839 Email: andrew.thomas@henryadams.co.uk

2. Eastleigh Borough Council Scheme (Bishopstoke)	
Which river basin catchment the scheme serves	Itchen, Test, Bartley Water
Which WWTWs the scheme serves	Chicken Hall Lane, Portswood, Millbrook, Woolston, Ashlett Creek, Slowhill Copse, plus all of the non-coastal works in the catchment areas
Contact details for the scheme	Email: nutrientoffset@eastleigh.gov.uk Eastleigh Borough Council - Unlocking Development

3. Eastleigh Borough Council Scheme (Botley)	
Which river basin catchment the scheme serves	East Hampshire Rivers and River Hamble
Which WWTWs the scheme serves	Bishops Waltham
Contact details for the scheme	Email: nutrientoffset@eastleigh.gov.uk Eastleigh Borough Council - Unlocking Development

4. Hampshire and Isle of Wight Wildlife Trust (Isle of Wight Schemes)	
Which river basin catchment the scheme serves	East Hampshire Rivers
Which WWTWs the scheme serves	Peel Common, Budds Farm
Contact details for the scheme	Nutrient Reduction Programme, Hampshire and Isle of Wight Wildlife Trust Email: nitrates@hiwwt.org.uk

5. Kings Manor	
Which river basin catchment the scheme serves	West Isle of Wight, New Forest Rivers
Which WWTWs the scheme serves	Pennington
Contact details for the scheme	David Long Email: dlong@bcm.co.uk Stacey Attrill-Butler Email: sattrillbutler@bcm.co.uk

6. Roke Manor	
Which river basin catchment the scheme serves	Itchen, Test, Bartley Water
Which WWTWs the scheme serves	Chicken Hall Lane, Portswood, Millbrook, Woolston, Ashlett Creek, Slowhill Copse, plus all non-coastal works in the catchment areas
Contact details for the scheme	Ollie Mitchell Email: ollie@ovingtonpark.co.uk

7. Warnford Park Estate	
Which river basin catchment the scheme serves	River Meon and East Hampshire Rivers
Which WWTWs the scheme serves	Peel Common, Budds Farm, Ashlett Creek
Contact details for the scheme	Mark Budden Email: mark@land-consult.com

8. Whitewool Stream Wetland (Meon Springs)	
Which river basin catchment the scheme serves	River Meon and East Hampshire Rivers
Which WWTWs the scheme serves	Peel Common, Budds Farm, Ashlett Creek, Slowhill Copse
Contact details for the scheme	Jamie Butler Email: jamie@meonsprings.com

9. Hinton Ampner	
Which river basin catchment the scheme serves	Itchen
Which WWTWs the scheme serves	New Alresford, Harestock, Morestead, Chickenhall, Portwood, Woolston
Contact details for the scheme	George Upex Email: george.upex@nationaltrust.org.uk Tel: 07484 513776

10. Grange Estate Abbotstone (nitrate (N) and phosphate (P) mitigation scheme)	
Which river basin catchment the scheme serves	Nitrate mitigation - Test/Itchen/Bartley Water Phosphate mitigation - Itchen
Which WWTWs the scheme serves	Nitrate - Chickenhall, Morestead, Harestock, Portswood, Millbrook, Woolston, Ashlett Creek, Slowhill Copse, plus all non-coastal works in the catchment areas Phosphate - Morestead, Harestock, Chickenhall, New Alresford
Contact details for the scheme	Tony Langridge Tony Langridge Consulting Ltd Email: langridge.home@btinternet.com Tel: 07980 519 537

11. Knowle	
Which river basin catchment the scheme serves	River Meon and East Hampshire Rivers
Which WWTWs the scheme serves	Peel Common, Budds Farm, Ashlett Creek, Slowhill Copse
Contact details for the scheme	Jason Lewis Estates Cicero Email: jason@ciceroestates.co.uk Tel: 07798621585

12. Blackburn Farm	
Which river basin catchment the scheme serves	Itchen, Test, Bartley Water
Which WWTWs the scheme serves	tbc
Contact details for the scheme	Harvey Davies Thrings Direct Dial: 0117 374 9618 Mobile: 0739 376 6825 Email: hdavies@thrings.com

13. Porchfield (Heaton Farm)	
Which river basin catchment the scheme serves	Isle of Wight, New Forest, and East Hampshire Rivers
Which WWTWs the scheme serves	Peel Common, Pennington
Contact details for the scheme	Andrew Heaton Heaton Farms Ltd Email: andrew.heaton@heatonfarms.co.uk

14. Warblington	
Which river basin catchment the scheme serves	East Hampshire Rivers
Which WWTWs the scheme serves	Budds Farm and Thornham
Contact details for the scheme	Havant Borough Council

15. Shalfleet	
Which river basin catchment the scheme serves	Isle of Wight rivers, New Forest rivers, East Hampshire rivers
Which WWTWs the scheme serves	Calbourne, Newtown Isle of Wight, Peel Common, Pennington and Shalfleet
Contact details for the scheme	Jack Potter Galingale j.potter@galingale.co.uk 07422 710452

16. Winchester City Council – Northington (Nitrate (N) and Phosphate (P) mitigation scheme)	
Which river basin catchment the scheme serves	Nitrate mitigation – Test / Itchen Phosphate mitigation – Itchen
Which WWTWs the scheme serves	Nitrates: Chickenhall (part), Harestock, Morestead, New Alresford Phosphates: Chickenhall (part), Harestock, Morestead
Contact details for the scheme	Winchester City Council – New Homes newhomes@winchester.gov.uk 07980 732 139

17. Stubbington Mitigation Scheme (Solent Mitigation Partnership)	
Which river basin catchment the scheme serves	River Meon and East Hampshire Rivers
Which WWTWs the scheme serves	Peel Common, Budds Farm, Ashlett Creek
Contact details for the scheme	Solent Mitigation Partnership Website: Solent Mitigation Partnership Email: EnvironmentalMitigation@fareham.gov.uk

18. Keyhaven (Kingwell)	
Which river basin catchment the scheme serves	New Forest Rivers (Avon Water, Danes Stream, Dark Water, Sowley Stream, Pennington and Beaulieu/Lymington rivers)
Which WWTWs the scheme serves	
Contact details for the scheme	Website: Nitrate Credits — Kingwell

19. Roundbarrow Nature Reserve	
Which river basin catchment the scheme serves	Itchen, Test, Bartley Water
Which WWTWs the scheme serves	Chicken Hall Lane, Portswood, Millbrook, Woolston, Ashlett Creek, Slowhill Copse, plus all non-coastal works in the catchment areas
Contact details for the scheme	Rachel Jones Email NutrientScheme@wiltshire.gov.uk

ENDS