



## **The White Cottage**

### Nutrient Neutrality Assessment and Mitigation Strategy

February, 2025

Prepared for:

Emma Hemsley

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| 1     | 06.03.25 | Comment | AA     | BT         |
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## 1 INTRODUCTION

### 1.1 Appointment

WCI have been appointed by Emma Hemsley. (the 'Client') to prepare a nutrient neutrality assessment and mitigation strategy (NNMAS) to support a planning application at The White Cottage, Semley, SP7 9JX.

### 1.2 Purpose

This assessment aims to establish the current and proposed total phosphorous (TP) levels of the site and present a strategy for achieving nutrient neutrality.

Nutrient neutrality is a requirement for planning permission for river catchment areas affected by high levels of phosphorous as indicated in Natural England advice letter for proposed developments, dated 16 March 2022<sup>1</sup>.

## 2 EXECUTIVE SUMMARY

This report presents the Nutrient Neutrality Assessment and Mitigation Strategy for the demolition of an existing dwelling and its replacement with a new dwelling at The White Cottage, Semley, SP7 9JX

The development site lies within the hydrological catchment of the River Avon and is subject to Phosphate Neutrality requirements.

The development will generate a residual total phosphorus load of 0.00 kg.TP/yr without any mitigation in place.

The proposed development will be phosphate neutral as a result of betterment generated from the reduction of occupation.

## 3 SITE DESCRIPTION

### 3.1 Proposed development

The proposed development is for the demolition of an existing dwelling and its replacement with a new dwelling. Please refer to the Brimble Lea Chartered Planning Consultants & Architects of the development.

### 3.2 Site location

The site is The White Cottage, Semley with postcode SP7 9JX and is centred on grid reference ST 86799 27125.

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<sup>1</sup> Natural England letter (March 2022) – "Advice for development proposals with the potential to affect water quality resulting in adverse impacts on habitats sites.



The site lies within the hydrological catchment of the River Avon. The River Avon is a key tributary of the River Avon Special Areas of Conservation (SAC) and is a designated SSSI site.

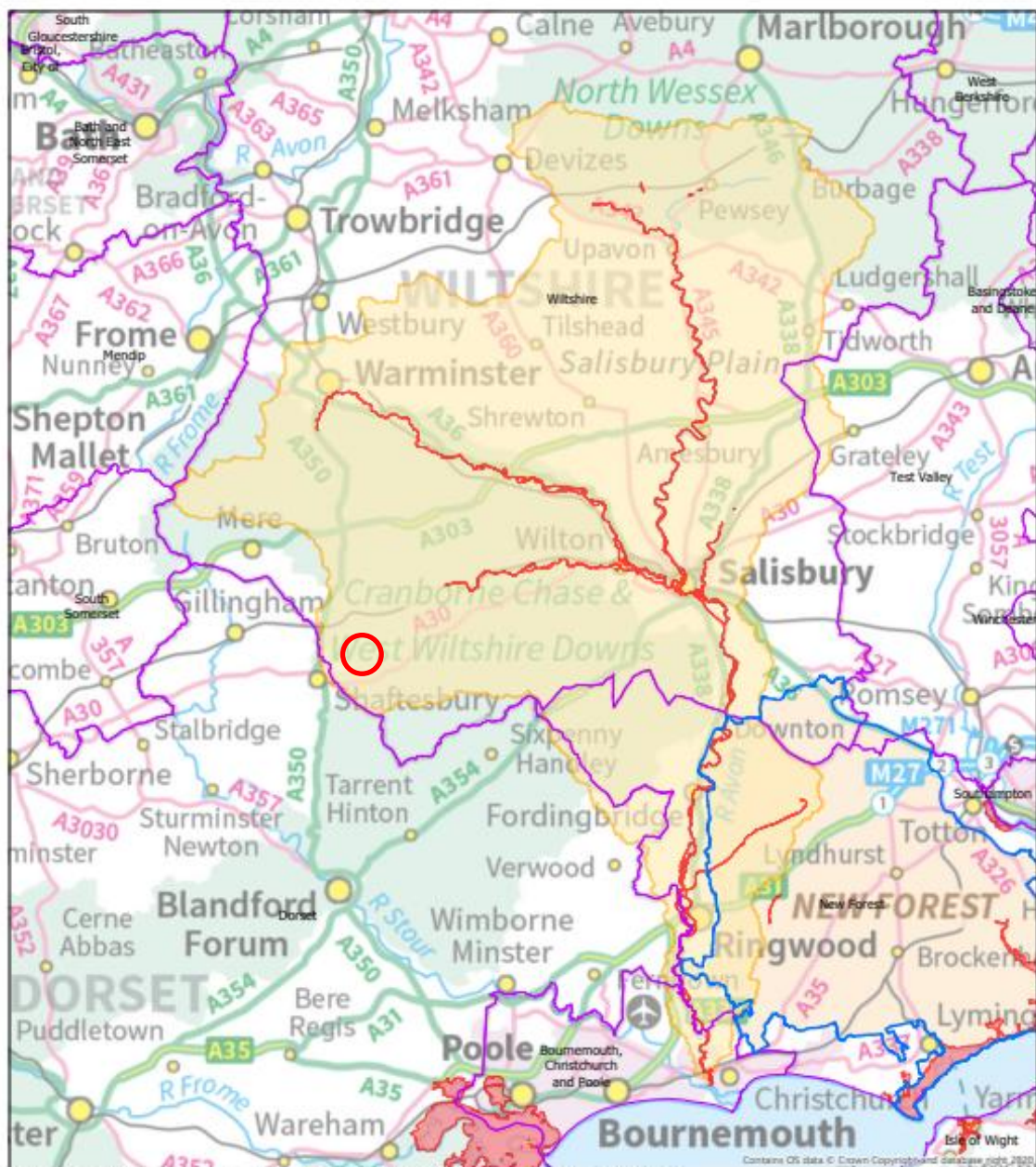


Figure 2 - River Avon Hydrological Catchment

### 3.4 Existing drainage arrangements

The existing dwelling is served by a private septic tank, which treats domestic effluent and discharges to the ground via a soakaway

### 3.5 Drainage strategy

THE SITES WITHIN THE WESSEX WATER AREA OF OPERATION WESSEX WATER ASSET MAPS INDICATE THAT THERE ARE NO PUBLIC Foul OR COMBINED SEWERS WITHIN THE VICINITY OF THE SITE. THE CLOSEST SEWERS LOCATED APPROXIMATELY 0.456 KM TO THE SOUTHEAST, WHICH IS OUTSIDE THE EA'S PROPORTIONATE FEASIBILITY CRITERIA. SEE

Appendix A – Wessex water asset maps

As the proposed development does not change in occupation and there is no requirement to connect to public sewer, sewage from the proposed development will therefore continue to be treated by the existing septic tank and discharged to ground.

## 4 NUTRIENT NEUTRALITY ASSESSMENT

### 4.1 Basis for assessment

This assessment of phosphate load and mitigation has been undertaken in accordance with the guidance available at the time of writing and may be subject to change as guidance evolves.

Where possible, the principles and data included in the Avon Nutrient Budget Calculator (ANBC) has been applied. For ease of presentation and interpretation, some of the calculations included in the ANBC are re-created in spreadsheet format referencing the appropriate sources where necessary.

Not all assessments and mitigations are covered by the ANBC and in these instances, separate calculations are made using reputable sources.

A summary of the phosphate balance calculations can be found in Appendix B – Phosphate Balance.

### 4.2 Stage 1 – Phosphate load due to occupancy

Sewage from the existing development is treated through a septic tank and discharged to the ground via a soakaway, which treats phosphates to 11.6 mg/L. Therefore, the current occupation of the site results in a phosphate load of 1.22 kg.TP/yr

The proposed development is a single dwelling with an implied occupancy of 2.4 persons.

Sewage from the proposed development will continue to use the existing septic tank and will be discharged to the ground. Therefore, the proposed occupation of the site will result in a phosphate load of 1.22 kg.TP/yr giving a net reduction of 0.00 kg.TP/yr.

### 4.3 Stage 2 – Pre-development phosphate load due to land-use

The ANBC presents phosphate loads according to different land use definitions. These land uses are defined according to the CORINE 2018 land use data. A full list of land use definitions is included in Appendix C – Land use Definition

Other defining land-use characteristics within the ANBC are soil drainage type, annual average rainfall (AAR) and whether the site lies within a nitrate vulnerability zone (NVZ). These have been summarised below for the site:

| Catchment characteristics     | Result                    |
|-------------------------------|---------------------------|
| Phosphate Catchment           | Avon Hampshire            |
| Soil drainage type            | Slightly impeded drainage |
| Annual Average Rainfall (AAR) | 850-900 mm/yr             |
| Nitrate Vulnerable Zone (NVZ) | No                        |

Table 1 - Catchment characteristics

The site covers an area of **0.118 ha** and is currently classed as residential urban which carries an export coefficient of 1.85 kg.TP/yr/ha and therefore generates a TP load of 0.22 kg.TP/yr.

#### 4.4 Stage 3 – Post development phosphate load due to land-use

The proposed development will retain the same land use class of 'residential urban' and will therefore also generate 0.22 kg.TP/yr.

As such, there will be **0.00kg.TP/yr** increase in TP through change of land use.

#### 4.5 Phosphate summary

| Description                                             | Load (kg.TP/yr) <sup>2</sup> |
|---------------------------------------------------------|------------------------------|
| TP from Current Occupation                              | 1.22                         |
| TP from Proposed Occupation                             | 1.22                         |
| <b>Change in TP due to Change in Occupation</b>         | <b>0.00</b>                  |
| TP from Current Land Use                                | 0.22                         |
| TP from Proposed Land Use                               | 0.22                         |
| <b>Change in TP due to Change in Land Use</b>           | <b>0.00</b>                  |
| <b>Net Change in TP due to Development</b>              | <b>0.00</b>                  |
| Precautionary Buffer (+20%)                             | 0.00                         |
| <b>TP produced by the development before mitigation</b> | <b>0.00</b>                  |

Table 2 - Phosphate summary

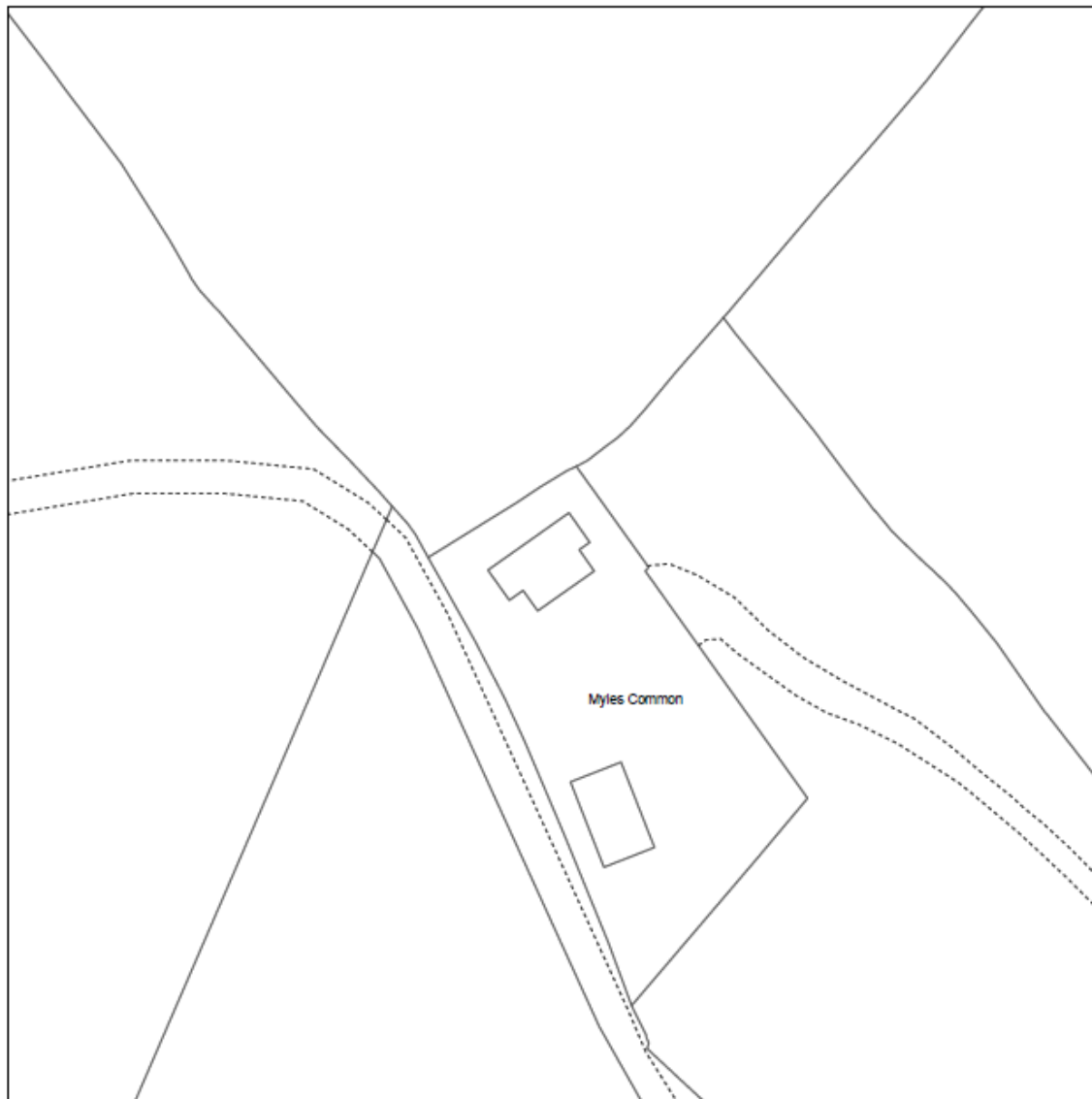
## 5 CONCLUSION

The development will generate a residual total phosphorus load of 0.00 kg.TP/yr and is subsequently 'nutrient neutral'.

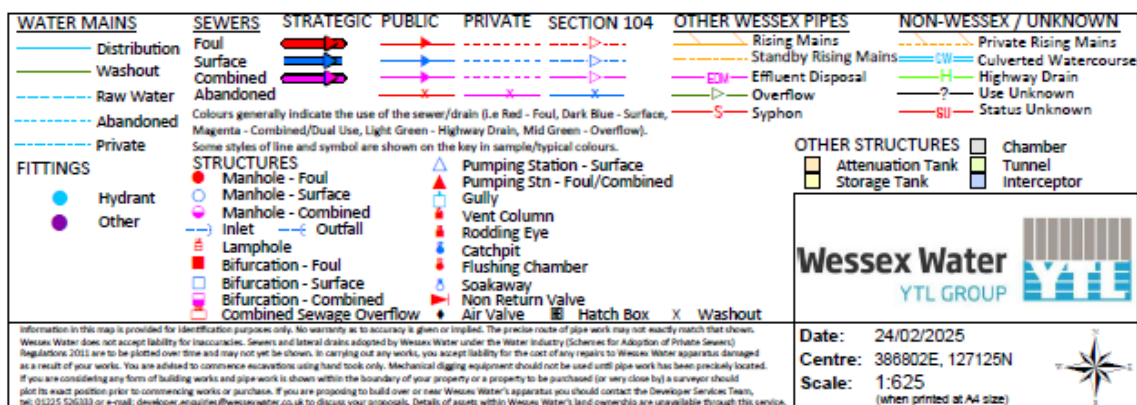
<sup>2</sup> All values rounded to be in accordance with ANBC calculations.

## APPENDIX A – WESSEX WATER ASSET MAPS

### Wessex Water Network Map



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## APPENDIX B – PHOSPHATE BALANCE

| Nutrients from wastewater <b>Current occupation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                          |
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| <p>This sheet contains 2 tables. The tables are separated by a heading, which describes the following table.</p> <p><b>Note:</b> You will need to fill in cells B5 to B9 in the first table 'Water infrastructure information'. Cells B10 is automatically calculated and will state '0.00' unless the user inputs have been entered. Cells A11 to A12 and B11 to B12 are automatically generated and will state 'Not applicable' depending on the inputs to cells B5 and B9. You may need to fill in cell C10 depending on the information you entered in cell B9. Cells C5 to C9 and cells C11 to C12 are intentionally blank cells.</p> <p>You do not need to fill in any cells in the second table 'Final calculation of nutrient load from wastewater'. Cells B16 to B18 are automatically calculated and will state '0.00' unless the user inputs have been entered to the first table 'Water infrastructure information'. Cells A19 to A22, cells B20 and B22 are automatically generated and will state 'Not applicable' depending on the user inputs to the first table 'Water infrastructure information'. Cell B15, cell B19 and cell B21 are intentionally blank cells.</p> <p><b>How to fill in the table 'Water infrastructure information'</b></p> <p>Cell B5: Enter the date of first occupancy.</p> <p>Cell B6: Enter the average occupancy rate of the development. The default rate is 2.4, this should not be edited without sufficient evidence.</p> <p>Cell B7: Enter the water usage. This value should be kept at 120 unless other efficiency measures are used.</p> <p>Cell B8: Enter the total number of dwellings or units that will be within the development site as of the project completion date.</p> <p>Cell B9: Choose the receiving wastewater treatment works (WwTW) from the dropdown list. If you select 'Package Treatment Plant user defined' or 'Septic Tank user defined', you must enter their certified value of total phosphorus (TP) in cell C10. Otherwise the default values will be used in the calculation of the nutrient load associated with wastewater.</p> <p>Nutrient permits may be changing for the WwTW you select, from 01/01/2025, or 01/04/2030. If the date of first occupancy is in-between changing permit dates, multiple</p> |                                          |
| Water infrastructure information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                          |
| Description of required information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Data entry column - user inputs required |
| Date of first occupancy (dd/mm/yyyy):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                          |
| Average occupancy rate (people/dwelling or people/unit):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2.40                                     |
| Water usage (litres/person/day):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 120                                      |
| Development proposal (dwellings/units):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1                                        |
| Wastewater treatment works:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Septic Tank default                      |
| Current wastewater treatment works P permit (mg TP/litre):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 11.60                                    |
| Not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Not applicable                           |
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| Final calculation of nutrient load from wastewater                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                          |
| Description of values generated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Values generated                         |
| Wastewater nutrient loading                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                          |
| Additional population (people):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2.40                                     |
| Wastewater by development (litres/day):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 288.00                                   |
| Annual wastewater TP load (kg TP/yr):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1.22                                     |
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| Not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Not applicable                           |
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| Not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Not applicable                           |

| Nutrients from wastewater <b>Proposed occupation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                          |                                                            |
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| Water infrastructure information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                          |                                                            |
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| Date of first occupancy (dd/mm/yyyy):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 01/01/2026                               |                                                            |
| Average occupancy rate (people/dwelling or people/unit):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2.40                                     |                                                            |
| Water usage (litres/person/day):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 120                                      |                                                            |
| Development proposal (dwellings/units):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1                                        |                                                            |
| Wastewater treatment works:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Septic Tank default                      |                                                            |
| Current wastewater treatment works P permit (mg TP/litre):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 11.60                                    |                                                            |
| Not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Not applicable                           |                                                            |
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| Final calculation of nutrient load from wastewater                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                          |                                                            |
| Description of values generated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Values generated                         |                                                            |
| <b>Wastewater nutrient loading</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                          |                                                            |
| Additional population (people):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2.40                                     |                                                            |
| Wastewater by development (litres/day):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 288.00                                   |                                                            |
| Annual wastewater TP load (kg TP/yr):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1.22                                     |                                                            |
| <b>Not applicable</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                          |                                                            |
| Not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Not applicable                           |                                                            |
| <b>Not applicable</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                          |                                                            |
| Not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Not applicable                           |                                                            |

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| Nutrients from future land use                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                  |                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------|
| <p>This sheet contains one table.</p> <p><b>Note:</b> You will need to fill in cells A5 to A21 and B5 to B21. Cells B22 and C5 to C22 are automatically generated calculations and will state '0.00' unless the user inputs have been entered. Row 22 is a Total Row. The Total Row states 'Totals:' in cell A22 and automatically calculates the total sum of cells B5 to B21 in cell B22 and C5 to C21 in cell C22.</p> <p><b>How to fill in the table 'Future land uses'</b></p> <p>Cells A5-A21: Choose the future (post-development) land use type(s) of landcover present on the new site from the dropdown list</p> <p>Cells B5-B21: Enter the area in hectares of each land use type.</p> <p>The nutrient load from future land uses is shown in cells C5 to C21 for total phosphorus (TP).</p> <p>The total nutrient load from future land uses is shown in cell C22 for TP.</p> |                                  |                                     |
| Future land uses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                  |                                     |
| New land use type(s) - user inputs required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Area (ha) - user inputs required | Annual phosphorus export (kg TP/yr) |
| Residential urban land                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0.12                             | 0.22                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | 0.00                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | 0.00                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | 0.00                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | 0.00                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | 0.00                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | 0.00                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | 0.00                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | 0.00                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | 0.00                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | 0.00                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | 0.00                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | 0.00                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | 0.00                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | 0.00                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | 0.00                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | 0.00                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | 0.00                                |
| <b>Totals:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>0.12</b>                      | <b>0.22</b>                         |

## APPENDIX C – LAND USE DEFINITION

| Land Use                          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Urban                             | Development which encompasses the built form, gardens, paths, roads, hardstanding's, parks and small areas of open space, ponds and SuDS. The phosphorous load results from sewer overflows and from drainage that picks up phosphorous on the urban land. Agricultural barns used for storage of materials, farming supplies and temporary livestock can be classified as Urban. However, barns used for a specific farming type (e.g. piggeries and chicken farms) should be classified under the relevant farming land use. |
| Mineral Workings and Quarries     | An open or surface mineral working, usually for the extraction of building stone, as slate, limestone, etc.                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Allotment and City farms          | Wholly or mainly cultivated for the production of vegetable or fruit crops for consumption by the tenant or local community. In some cases the land will also be used for ornamental plants and the keeping of hens or bees.                                                                                                                                                                                                                                                                                                   |
| Sports and Leisure facilities     | Facilities used for recreational purposes such as managed sports pitches, athletic fields, gymnasiums, swimming pools etc.                                                                                                                                                                                                                                                                                                                                                                                                     |
| Transport tracks and ways         | Encompasses large infrastructure such as motorways and significant rail infrastructure. Small scale roads and tracks are covered under the Urban land use                                                                                                                                                                                                                                                                                                                                                                      |
| Transport terminals               | A large scale facility where passengers and freight are assembled or dispersed                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Cereals                           | Holdings on which cereals, combinable crops and set-aside account for more than two thirds of the total standard output.                                                                                                                                                                                                                                                                                                                                                                                                       |
| Dairy                             | Holdings on which dairy cows account for more than two thirds of their total standard output.                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Cropping                          | Holdings on which arable crops (including field scale vegetables) account for more than two thirds of the total standard output, excluding holdings classified as cereals; holdings on which a mixture of arable and horticultural crops account for more than two thirds of their total SO excluding holdings classified as horticulture and holdings on which arable crops account for more than one third of their total standard output and no other grouping accounts for more than one third.                            |
| Horticulture                      | Holdings on which fruit (including vineyards), hardy nursery stock, glasshouse flowers and vegetables, market garden scale vegetables, outdoor blubs and flowers and mushrooms account for more than two thirds of their total standard output.                                                                                                                                                                                                                                                                                |
| Pig Farming                       | Holdings on which pigs account for more than two thirds of their total standard output.                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Lowland grazing / Paddock         | Holdings on which cattle, sheep and other grazing livestock account for more than two thirds of their total standard output except holdings classified as dairy. A holding is classified as lowland if less than 50% of its total area is in the Less Favoured Area (LFA). A paddock is classified as a small enclosure used for grazing horses.                                                                                                                                                                               |
| Mixed livestock                   | Holdings for which none of the other categories account for more than two thirds of total standard output. This category includes mixed pigs and poultry farms as well as farms with a mixture of crops and livestock (which neither accounts for more than two thirds of standard output.                                                                                                                                                                                                                                     |
| Poultry farming                   | Holdings on which poultry account for more than two thirds of their total standard output.                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| General Arable                    | Use this option if unsure of the breakdown of arable land.                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Improved grass                    | Land used for grazing (other than arable land) where over one third of the sward comprises, singly or in a mixture, ryegrass, cocksfoot or timothy, or land that has been improved by management practices such as liming and top dressing, where there is not a significant presence of sensitive plants species indicative of native unimproved grassland.                                                                                                                                                                   |
| Unimproved grass                  | Land used for grazing or mowing which is not normally treated with mineral fertiliser or lime and contains a significant presence of sensitive plant species indicative of native unimproved grassland.                                                                                                                                                                                                                                                                                                                        |
| Open Space / Greenfield           | Greenfield areas that have not been in agricultural use for at least 10 years and are not subject to unmanaged recreational use.                                                                                                                                                                                                                                                                                                                                                                                               |
| Woodland                          | Tree-covered areas which either arose naturally or as a result of plantations. This includes conifer woodland, mixed woodlands and broad-leaved woodlands etc.                                                                                                                                                                                                                                                                                                                                                                 |
| shrub / heathland / bracken / bog | Land that contains extensive areas of either shrubs, heath or bracken A bog refers to land that is a wetland area of muddy ground that can accumulate peat.                                                                                                                                                                                                                                                                                                                                                                    |
| Freshwater marsh                  | Non-tidal, non-forested marsh wetland that contains fresh water, and is continuously or frequently flooded.                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Meadow / semi natural grassland   | A meadow is a field habitat vegetated by grass and other non-woody plant that has an open character and is not grazed by livestock                                                                                                                                                                                                                                                                                                                                                                                             |
| Wetland                           | Land use specific to constructed wetland only and does not include ponds or SuDS.                                                                                                                                                                                                                                                                                                                                                                                                                                              |