Consulting Civil Engineers

# Water Neutrality Report

## Rye Island, Hollands Lane, Henfield, East Sussex

## For

## Katherine Hudson and Alex Yearsley

Rev – **P1**

Reference **C3402**

Date **27th November 2024**

| Revision | Date of Issue | Comments | Prepared By | Checked By |
|---|---|---|---|---|
| P- | 06.11.2024 | Initial Issue | LT | CS |
| **P1** | 27.11.2024 | Updated to clarify the proposals | LT | CS |
| | | | | |

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# 1 Introduction

1.1.1 CGS Civils Ltd has been appointed by Katherine Hudson and Alex Yearsley to undertake a Water Neutrality Report for a proposed development at Rye Island, Hollands Lane, Henfield. Planning permission is sought to regularise the existing change of use of the land and buildings from agricultural to office use, use as a workshop, as storage and as a showroom for events businesses. Planning permission is also sought to regularise the existing change of use of the external yard area from the storage of plant and machinery to the storage of metal containers used in connection with events business. The existing storage caravan is to be retained.

1.1.2 The site falls within the Sussex North Water Supply Zone, in which Natural England have written to all authorities within the zone providing a position statement for applications which may place increased pressure on this zone. This explains that recent case law has established that abstraction from the Supply Zone may be having an impact on protected sites (Arun Valley Special Area of Conservations (SAC), Special Protection Area (SPA) and Ramsar site).

1.1.3 As a result, developments within this zone must not add to this impact, as such, the purpose of this report is to therefore provide an overview on the potential water usage changes on the site because of the proposed development, and to confirm that the site is water neutral.

**Fig 1. Sussex North Water Supply Zone Area**

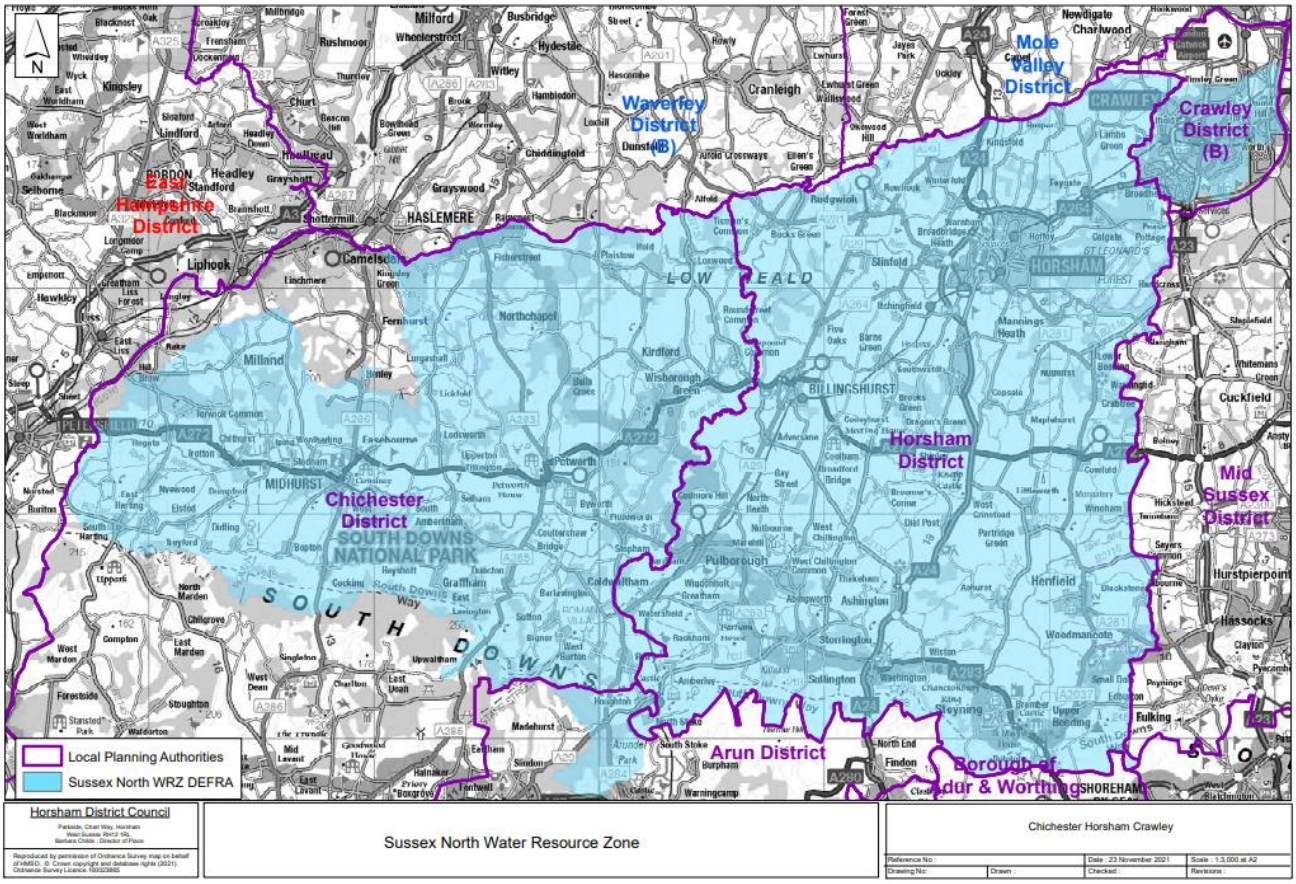
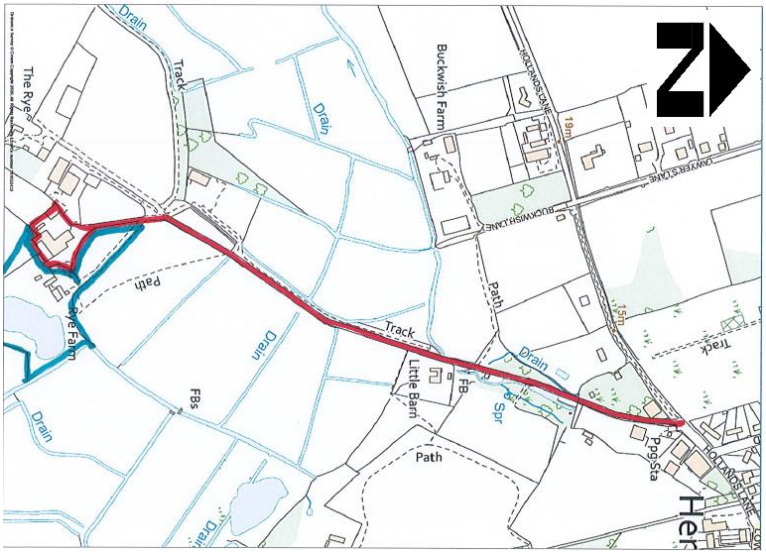


**Fig 2. Site Location**




1.1.4 The proposed development is located at OS Grid Reference TQ 20329 15119 and has the post code BN5 9QY.

1.1.5 Waterwise defined Water Neutrality as:

*'For every new development, total water use in the region after the development must be equal to or less than the total water uses in the region before the new development.'*

1.1.6 The benefits of water neutrality are wide ranging, from financial and reputational to environment and social. For example:

- **Saving Water** – Over 100,000 litres of water can be saved per year for each water neutral home built
- **Saving Carbon** – A significant CO2 saving can be achieved by reducing the demand for hot water for baths, showers, basins, dishwashers and washing machines
- **Saving Money** – Both water and energy bills will reduce
- **Reducing environmental impact** – Decreasing water abstracted from rivers and groundwater sources
- **Improved Resilience** – For the future by minimising the additional pressure on water resources
- **Enabling future housing growth** – In water scarce areas by reducing the impact of new homes and buildings
- **Reducing discharge to sewage** – by using less water, collecting rainwater and recycling greywater, less water is discharged to the drainage network
- **Short pay-back time** – After approximately 5 years the saving of water neutrality will outweigh the costs of doing so.

# 2 Executive Summary

2.1.1 The proposals intend to regularise an existing change of use, as such, for the purposes of this report, the "existing site" will be referring to the site before the existing change of use took place, with the "proposed site" referring to the current situation. The existing site currently consists of agricultural land and buildings, an external yard previously used for plant and machinery storage and a storage caravan. As the existing agricultural buildings are currently out of use, the existing site's water demand is **0 l/day.** The proposed scheme will consist of the change of use of the land and buildings from agricultural to office use, use as a workshop, as storage and as a showroom for events businesses. The use of the external yard area will also be changed from the storage of plant and machinery to the storage of metal containers used in connection with events business. The existing storage caravan is to be retained.

2.1.2 As outlined within this report, the proposed offices will have no fittings installed, with the employees using the neighbouring dwelling's toilets and taps. The only employees using the offices will be the current residents of this dwelling, therefore no additional water demand will be generated by the offices. A compost toilet and hand sanitiser will be provided for delivery staff to use, which will generate no additional water demand There is no intention for any of the other buildings to be fitted with anything that could generate an additional water demand. This results in the proposals being water neutral by default.

**Table 1 Water Usage Comparison**

| | |
|---|---|
| **Existing Water usage** | **0.00 l/day** |
| **Proposed Scheme water usage** | 0.00 l/day |
| **Proposed Scheme water usage equal to or lower than existing site** | Yes |

# 3 Calculation of estimated water usage from the proposed development

3.1.1 The proposals intend to regularise an existing change of use, as such, for the purposes of this report, the "existing site" will be referring to the site before the existing change of use took place, with the "proposed site" referring to the current situation.

3.1.2 Before any necessary steps to achieve water neutrality can be determined, the total water demand for the proposed site must first be calculated. The proposed site will consist of the change of use of the land and buildings from agricultural to office use, use as a workshop, as storage and as a showroom for events businesses. The use of the external yard area will also be changed from the storage of plant and machinery to the storage of metal containers used in connection with events business. The existing storage caravan is to be retained

3.1.3 In this instance, it is proposed that the offices will not be constructed with any fittings that will increase the site's water demand. It is proposed that the two employees which will use the offices will use the toilets and taps of the neighbouring dwelling. In addition to this, the only two employees that will use the office will be the two residents of this dwelling, therefore no additional water demand will be generated by the offices.

3.1.4 It is not proposed that any of the other buildings will be fitted with anything that could generate an additional water demand. This results in the proposed site having a water demand of **0 l/day.**

3.1.5 A compost toilet and hand sanitiser will be provided for delivery staff to use, which will generate no additional water demand.

3.1.6 As this matches the water demand of the existing site, the proposals can be considered water neutral by default.

# 4 Conclusion

4.1.1 The water demand for both the existing and proposed sites will both be **0 l/day.** As this is the case, the proposals are water neutral.