Consulting Civil Engineers

# Existing Fittings Survey

## Wattlehurst Farm, Horsham

## For

## Charlotte Betchley

Rev – **P-**

Reference **C3090**

Date **9th April 2024**

| Revision | Date of Issue | Comments | Prepared By | Checked By |
|---|---|---|---|---|
| P- | 09.04.2024 | Initial Issue | LT | CS |
| | | | | |
| | | | | |

Richard Cobden House, Lion Street, Chichester, West Sussex, PO19 1LW
Tel: 01243 933253 E: mail@cgscivils.co.uk W: www.cgscivils.co.uk

# 1 Introduction

1.1.1 CGS Civils Ltd has been appointed by Charlotte Betchley to undertake an Existing Fittings Survey in support of a Water Neutrality Report (C3090 Water Neutrality Report) for a proposed development at Wattlehurst Farm, Dorking Road, Horsham. Planning permission is sought for the removal of a 2-bedroom temporary mobile home and the construction of a 4-bedroom dwelling.

1.1.2 The purpose of this report is to provide an overview on the existing fittings and their water usages of the existing 2-bedroom mobile home.

1.1.3 The mobile home currently has three occupants and this occupancy value has been used within the calculations of this report.

1.1.4 The water usage calculations within this report have been made using the Water Calculator from Building Regulations G as per the accompanied Water Neutrality Report.

# 2 Existing 2-bedroom mobile home

| Fittings | Type of Fitting | Existing Water usage (l/day) |
|---|---|---|
|  | Toilets | Full flush – 8.76<br>Part flush – 11.84 |
|  | Taps (excluding kitchen) | 11.06 |
|  | Bath (shower also present) | 20.35 |

| | | |
|---|---|---|
|  | Shower (bath also present) | 43.70 |
|  | Kitchen sink taps | 13.88 |
| | Total (l/p/day) with normalisation factor and 5l/p/day added for outdoor use (refer to appendix A): | 104.73 |
| | Total water demand (l/day) based on the three current occupants: | 314.19 |

# 3 Conclusion

3.1.1 As indicated within the report above, the water demand of existing 2-bedroom mobile home can be calculated to be **314.19 l/day**.

3.1.2 The water demand from the proposed 4-bedroom will be **254.65 l/day** after water efficient fittings are installed (refer to C3090 Water Neutrality report). This results in a total reduction in water demand of **59.54 l/day** over the existing site, making the proposals water neutral.

# 4 Appendices

## 4.1 Appendix A:

**Table 2 – Water Calculator from Building Regulations Part G – Information input from existing property.**

| The Water Calculator for New Dwellings with Water efficient measures | | | | | |
|---|---|---|---|---|---|
| Installation Type | Unit of measure | Volume/ flow rate | Use factor | Fixed use | Litres/person/day |
| WC (Single Use) | Flush volume (l) | 0 | 4.42 | 0 | 0 |
| WC (Dual Flush) | Full Flush Vol. | 6 | 1.46 | 0 | 8.76 |
| | Part Flush vol. | 4 | 2.96 | 0 | 11.84 |
| WC (Multiple Fittings) | Average effective flush volume (l) | 0 | 4.42 | 0 | 0 |
| Taps (excl. Kitchen) | Flow rate (l/min) | 6 | 1.58 | 1.58 | 11.06 |
| Bath (shower also present) | Capacity to overflow (l) | 185 | 0.11 | 0 | 20.35 |
| Shower (bath also present) | Flow rate (l/min) | 10 | 4.37 | 0 | 43.70 |
| Bath only | Capacity to overflow (l) | 0 | 0.5 | 0 | 0 |
| Shower only | Flow rate (l/min) | 0 | 5.6 | 0 | 0 |
| Kitchen sink taps | Flow rate (l/min) | 8 | 0.44 | 10.36 | 13.88 |
| Washing Machine | Litres/kg dry load | 0 | 2.1 | 0 | 0 |
| Dishwasher | litres/place setting | 0 | 3.6 | 0 | 0 |
| Waste disposal unit | litres/use | 0 | 3.08 | 0 | 0 |
| Water softener | litres/person/day | 0 | 1 | 0 | 0 |
| | | Total Calculated use (l/p/d) | | | 109.59 |
| | | Contribution from greywater (l/p/d) | | | 0 |
| | | Contribution from rainwater (l/p/d) | | | 0 |
| | | Normalisation factor | | | 0.91 |
| | | External water use | | | 5 |
| | | Total water consumption (36(1)) (l/p/d) | | | 104.73 |