

## As Built Water Efficiency Report Part G

**Client:** Andreas + Buxton Associates

**Site:** 40 Broomfield Lane,  
London,  
N13 4HH

**Proposals:** The conversion and extension of an existing dwelling into 4x self-contained flats

## Contents

1. Introduction.....	3
2. Existing and Proposed Development .....	4
3. Water Efficiency Background .....	5
4. Water Fittings Details .....	6
5. Water Calculation Result .....	8
6. Conclusion .....	8

### Report Details:

Prepared by	Date	Project
Liam Rushton	22.03.23	8632 Rev1

This document has been prepared solely as a Water Efficiency Calculation Report in line with Part G 2016 for Andreas + Buxton Associates. Base Energy Services Ltd accepts no responsibility or liability for any use that is made of this document other than by the Client for the purposes for which it was originally commissioned and prepared.

## 1. Introduction

From 6th April 2010 Part G of the building regulations came into force. The document has been set out to recognise the requirements for Sanitation, Hot water and water efficiency. Where this report concentrates on Water Efficiency of dwellings based on section 17.K.

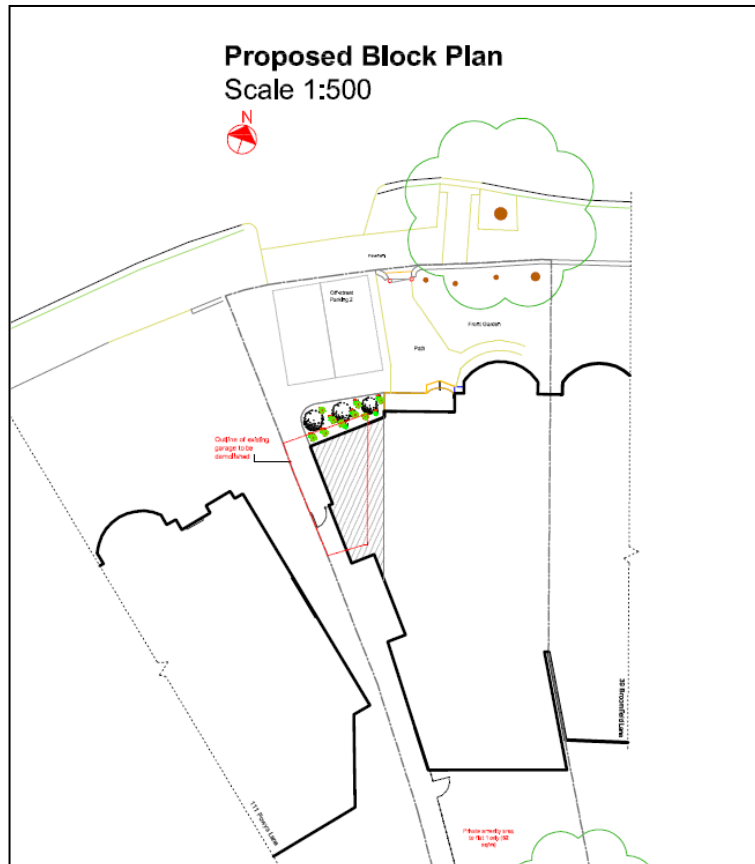
The calculator tool has been designed to comply with the 'Water Efficiency Calculator for New Dwellings' and Approved Document Part G Building Regulations 2000 (as amended).

**The proposed development will need to achieve a 105L/person/day saving indoor water use based on The London Borough of Enfield planning condition 6.**

The below table shows the step change in CO2 emissions and Water efficiency based on the Code for Sustainable Homes. The Code for Sustainable Homes is being phased out, however the issue 'Wat 1' has been incorporated into the Building regulations and is proposed that future water efficiency targets will be brought in to force.

Code Levels	Minimum Entry Requirements		Total points score out of 100
	Energy Improvement over target emission rates	Water Litres / person / day	
Level 1	Compliance with Part L of the Building Regulations 2010 required	Compliance with Part G of the Building Regulations 2010 required	36
Level 2	Compliance with Part L of the Building Regulations 2010 required	Compliance with Part G of the Building Regulations 2010 required	48
Level 3	0%	105	57
Level 4	25%	105	68
Level 5	100%	80	84
Level 6	Zero Carbon	80	90

## 2. Existing and Proposed Development



The site is located at 40 Broomfield Lane, London, N13 4HH.

The site is to provide four self-contained flats each with a kitchen, a WC, a shower & bath (see figure 1).

### **3. Water Efficiency Background**

Fresh water is a fundamental resource and demand is higher than ever; it is being used at an increasing amount every day. This in turn has an increasing environmental impact on the climate change and lifestyle. Reduced water use will also have an impact on reducing CO2 emissions and greenhouse gasses from water industries. To help mitigate these risks and reduce the effects of climate change, there are several actions that could be taken.

Water tariffs are making people more aware of these issues, but this alone is not enough.

All new build dwellings are now required to have a water efficiency assessment carried out to comply with building regulations. The aim of this is to have more efficient indoor water fittings installed.

Local councils have taken further steps to investigate incentives to encourage retrofitting of efficient appliances in the existing housing stock. Where they are using WAT 1 of the CSH 1 as targets levels to go beyond building regulations and make a bigger positive impact on water efficiency in homes.

The government is taking steps towards water suppliers and water users to continue to implement water efficiency measures and should continue to innovate and adapt to meet particular circumstance.

Consumers can reduce their water usage employing water efficiency practises in their home, such as turning the water off while brushing teeth or running washing machines only when they are full.

#### 4. Water Fittings Details

The below water figurers are what will be required to comply with the requirement of 105L/person/day. These figures can vary when installed, but the water calculation should be carried out before the installation of the fittings to make sure the target of 105L/person/day is still achievable.

**Table 1 Water Fittings**

Taps	Litres	Number of fittings
Basin Taps	4	2
Kitchen tap	4	1

Showers	Flow rate (Litres)	Number of fittings
House shower	8	2

Baths	Capacity to over flow (Litres)	Number of fittings
Bath	180	2

Dishwasher	Litres / Kg/ Dry load	Number of fittings
Dishwasher (default)	1.25	1

Washing machine	Litres / place / setting	Number of fittings
Washing machine (default)	8.17	1

WC's	Flush (Litres)	Number of fittings
WC	4 to 2.5	2

## 5. Water Calculation Result

Assessment reference	Dwelling reference	Total Water Consumption (litres / person / day)	Compliance
8632	40 Broomfield Lane	104.8	YES

\* The requirement is for there to be less than 105L/person/day to comply.

## 6. Conclusion

The proposals are for the extension and conversion of an existing dwelling into 4 self-contained flats at 40 Broomfield Lane, London, N13 4HH.

In line with the London Borough of Enfield planning condition 6, the development will need to achieve a 105L/person/day water efficiency through the provision of water efficient systems.

Through the incorporation of water efficient fittings as per table 1 above, the flats will result in an overall of 104.8 Litres/person/day if these indoor water fitting figures are applied (after flow restrictors are applied to the showers and taps). Please note this result applies to all flats although the total number of fittings varies. As such, all flats are therefore within the requirement for 105L/person/day as per the London Borough of Enfield planning condition.