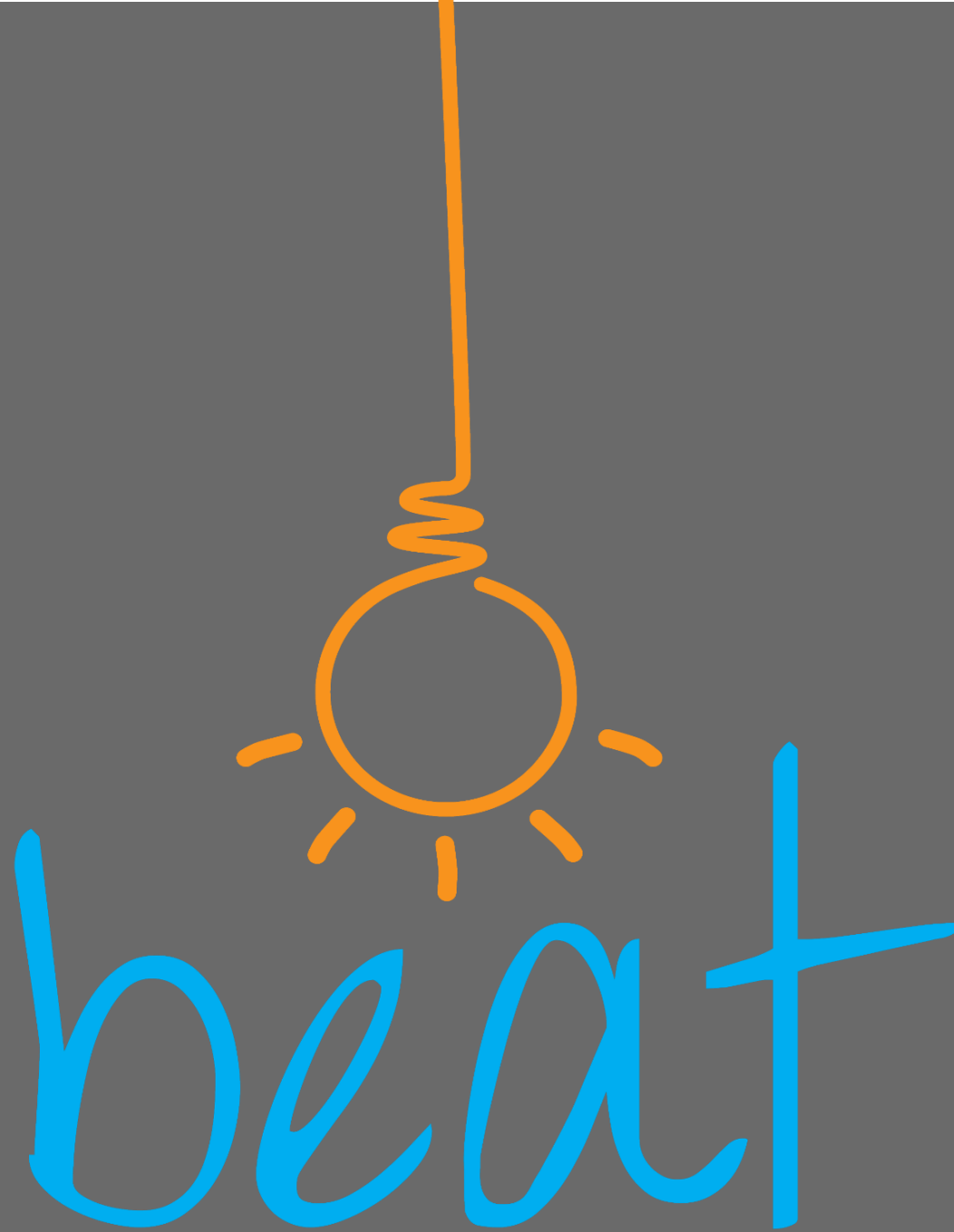




Your sustainable partner

**POST-PLANNING (SIMPLE CALC)
WATER EFFICIENCY
CALCULATION REPORT**

FOR

MR T RUDD

AT

**PLOT 1
15 ELM PARK ROAD
HAVANT**

1. Executive Summary

This report has been produced by BEAT Solutions Ltd on 24th May 2023 for Mr T Rudd to demonstrate for planning purposes that the predicted water usage for the dwelling will be 109.7 litres/person/day.

2. Introduction

BEAT Solutions have been instructed to calculate the predicted water usage for the dwelling using maximum flow rates and capacities detailed within this report. This report has been produced by Sophie Pinnick

The methodology used to calculate the water usage is the national approved BRE water efficiency calculation procedure.

A copy of this report should be submitted to the Local Planning Authority for conditional approval.

3. Predicted Water Fittings Specification

Mr T Rudd hasn't completed a schedule to confirm the water usage fixtures and fittings. Therefore this calculation is based on an assumed water usage target for each of the fitting types.

4. Compliance Summary

BEAT Solutions Ltd hasn't received sufficient information from the client to enable the internal water usage to be calculated. Therefore this calculation is based on an assumed water usage target for each of the fitting types. The schedule below confirms these target figures would achieve the following:-

Plot Type:	Detached House
Targeted Water Usage:	110.0 litres/person/day
Predicted Water Usage:	109.7 litres/person/day
Building Reg Compliant:	Yes
Planning Requirement:	110.0 litres/person/day
Planning Compliant:	Yes

PREDICTED SCHEDULE OF WATER FIXTURES & FITTINGS

Plot / Address	Plot 1, 15 Elm Park Road, Havant, , ,				Our Reference	WAT-0493/PLOT 1
No. of Bedrooms	3	Plot/House No.	Plot 1	Plot Type	Detached House	Occupancy rate for Calculation Purposes4

Basin Taps	Flow Rate	Quantity
Fitting Type	Litres/Min	(No.)
Flow Rate Not to Exceed (5l/min)	5.00	3
Total No. of Fittings (No.)		3
Total Flow (l/s)		15.00
Maximum Flow (l/s)		5.00
Average Flow (l/s)		5.00
Weighted Average Flow (l/s)		3.50
Flow for Calculation (l/s)		5.00

Bath	Capacity to	Quantity
Type	Overflow	(No.)
Capacity Not to Exceed (190L)	190.00	1
Total No. of Fittings (No.)		1
Total Capacity (l)		190.00
Maximum Capacity (l)		190.00
Average Capacity (l)		190.00
Weighted Average Capacity (l)		133.00
Capacity for Calculation (l)		190.00

Dishwasher	L per Place	Quantity
Type	Setting	(No.)
l/p/s		
Total No. of Fittings (No.)		0
Total Consumption (l)		1.25
Maximum Consumption (l)		1.25
Average Consumption (l/s)		1.25
Weighted Average Consumption (l)		0.88
Consumption for Calculation (l/s)		1.25

Kitchen & Utility Taps	Flow Rate	Quantity
Type	Litres/Min	(No.)
Flow Rate Not to Exceed (10l/min)	10.00	1
Total No. of Fittings (No.)		1
Total Flow (l/s)		10.00
Maximum Flow (l/s)		10.00
Average Flow (l/s)		10.00
Weighted Average Flow (l/s)		7.00
Flow for Calculation (l/s)		10.00

Showers	Flow Rate	Quantity
Fitting Type	Litres/Min	(No.)
Flow Rate Not to Exceed (7l/	7.00	2
Total No. of Fittings (No.)		2
Total Flow (l/s)		14.00
Maximum Flow (l/s)		7.00
Average Flow (l/s)		7.00
Weighted Average Flow (l/s)		4.90
Flow for Calculation (l/s)		7.00

W/C	Full Flush	Part Flush	
Type	Volume	Volume	Quantity (No)
Flow Rate Not to Exceed (6/3	6.00	3.00	3
Total number of fittings			3
Average effective flushing volume			3.99

Washing Machine	L per Kg	Quantity
Type	Dry Load	(No.)
(l/kg)		
Total No. of Fittings (No.)		0
Total Consumption (l)		8.17
Maximum Consumption (l)		8.17
Average Consumption (l/s)		8.17
Weighted Average Consumption (l)		5.72
Consumption for Calculation (l/s)		8.17

Waste Disposal Y/N	N
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Water Softner	
Consumption beyond 4% l/p/d	

Grey water and harvested rainwater	
Total Grey water from WHB taps (l)	
Total Availble Grey Water Supply (l)	205.96
Possible Demand (l)	139.17
Grey/Rain Installed Capacity (l)	

PREDICTED WATER EFFICIENCY CALCULATION

Water Use Assessment

Installation Type	Unit	Capacity/ Flow Rate	Use Factor	Fixed use (l/p/day)	Total Use (l/p/day)
WC Single Flush	Volume (l)	0.00	4.42	0.00	0.00
WC Dual Flush	Full Flush (l)	0.00	1.46	0.00	0.00
	Pt Flush (l)	0.00	2.96	0.00	0.00
WC's (Multiple)	Volume (l)	3.99	4.42	0.00	17.64
Taps Exc. Kitchen	Flow Rate	5.00	1.58	1.58	9.48
Bath (shower present)	(l/s)	190.00	0.11	0.00	20.90
Shower (bath present)	(l/s)	7.00	4.37	0.00	30.59
Bath Only	(l)	0.00	0.50	0.00	0.00
Shower Only	(l/s)	0.00	5.60	0.00	0.00
Kitchen Taps	(l/s)	10.00	0.44	10.36	14.76
Washing Machines	(l/kgdry)	8.17	2.10	0.00	17.16
Dishwashers	(l/place)	1.25	3.60	0.00	4.50
Waste Disposal	(l/s)	0.00	3.08	0.00	0.00
Water Softner	(l/s)	0.00	1.00	0.00	0.00
Total Calculated Water Use (l/p/day)					115.0
Grey/RainWater Reused (l)					0.0
Normalisation Factor					0.91
Total Consumption CSH (l/p/day)					104.7
External Water Use Allowance (l)					5.0
Total Comsumption Part G (l/p/day)					109.7
Assesment Result					PASS

<< Note - these are default values.

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