

Urban Greening Factor Calculator				
Surface Cover Type	Factor	Area (m ²)	Contribution	Notes
Semi-natural vegetation (e.g. trees, woodland, species-rich grassland) maintained or established on site.	1	2865	2865	
Wetland or open water (semi-natural; not chlorinated) maintained or established on site.	1	31	31	
Intensive green roof or vegetation over structure. Substrate minimum settled depth of 150mm.	0.8	2284	1827.2	
Standard trees planted in connected tree pits with a minimum soil volume equivalent to at least two thirds of the projected canopy area of the mature tree.	0.8	3933	3146.4	
Extensive green roof with substrate of minimum settled depth of 80mm (or 60mm beneath vegetation blanket) – meets the requirements of GRO Code 2014.	0.7	7632	5342.4	
Flower-rich perennial planting.	0.7	1998	1398.6	
Rain gardens and other vegetated sustainable drainage elements.	0.7	697	487.9	
Hedges (line of mature shrubs one or two shrubs wide).	0.6	1157	694.2	
Standard trees planted in pits with soil volumes less than two thirds of the projected canopy area of the mature tree.	0.6	830	498	
Green wall –modular system or climbers rooted in soil.	0.6		0	
Groundcover planting.	0.5	96	48	
Amenity grassland (species-poor, regularly mown lawn).	0.4		0	
Extensive green roof of sedum mat or other lightweight systems that do not meet GRO Code 2014.	0.3		0	
Water features (chlorinated) or unplanted detention basins.	0.2		0	
Permeable paving.	0.1	1653	165.3	
Sealed surfaces (e.g. concrete, asphalt, waterproofing, stone).	0	23355	0	
Total contribution			16504	
Total site area (m²)			46531	
Urban Greening Factor			0.354688272	

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NOTES:
 1. Do not scale from this drawing.
 2. Always work to noted dimensions.
 3. All dimensions are in millimetres unless otherwise stated.
 4. All setting out, levels and dimensions to be agreed on site.
 5. The dimensions of all materials must be checked on site before being laid out.
 6. This drawing must be read with the relevant specification clauses and detail drawings.
 7. Order of construction and setting out to be agreed on site.

- Semi-natural vegetation (e.g. trees, woodland, species-rich grassland) maintained or established on site. (1.0)
- Wetland or open water (semi-natural; not chlorinated) maintained or established on site. (1.0)
- Intensive green roof or vegetation over structure. Substrate minimum settled depth of 150mm. (0.8)
- Standard trees planted in connected tree pits with a minimum soil volume equivalent to at least two thirds of the projected canopy area of the mature tree (0.8)
- Extensive green roof with substrate of minimum settled depth of 80mm – meets the requirements of GRO Code 2014. (0.7)
- Rain gardens and other vegetated sustainable drainage elements (0.7)
- Flower-rich perennial planting (0.7)
- Hedges (line of mature shrubs one or two shrubs wide) (0.6)
- Groundcover planting (0.5)
- Amenity grassland (0.4)
- Extensive green roof of sedum mat or other lightweight systems that do not meet GRO Code 2014.(0.3)
- Permeable paving (0.1)
- Sealed surfaces (0)

Revision	Date	Description	Drawn	Apprvd.
P02	06.01.23	PLANNING	JV	DF

Planit I.E. Limited
 E: info@planit-ie.com W: planit-ie.com
 MANCHESTER
 2 Back Grafton St., Altrincham, WA14 1DY
 T: 0161 928 9281

LEEDS
 No.1 Aire Street, Leeds Station, Leeds, LS1
 4PR
 T: 0113 824 6413
 LIVERPOOL
 Tempest 5.3, 12 Tithebarn Street, Liverpool, L2
 2DT
 T: 0151 363 1230
 LONDON
 Unit 6 Waterside, 44-48 Wharf Road, London,
 N1 7UX
 T: 0207 253 5678
 STANDISH
 Standish Gatehouse, Stonehouse, Gloucestershire,
 GL10 3BZ
 T: 0145 360 7080

Client **Weston Homes**

Project **Anglia Square**

Drg Title **Urban Greening Factor_RevC**

Created on **09.12.22** Created by **JV** Approved by **DF**

Scale **1:500** Size **A1** Workstage **INFO**

Drg No. **ANG-PLA-XX-XX-DR-L-9001** Suitability **S4** Revision **P02**

APPENDIX 15

Letter on Off-site Enhancements for Recreation from
Norwich City Council to Weston Homes
dated 12 January 2023



NORWICH
City Council

Date: 12 January 2023

Application Reference: 22/00434/F
Case Officer: Tracy Armitage

Jack Riggs
Weston Homes Plc

Dear Mr Riggs,

**Proposed development at Anglia Square: Application reference: 22/00434/F
Norfolk Green Infrastructure and Recreational impact Avoidance and
Mitigation Strategy Habitats Regulations Assessment Strategy Document
March 2021**

I refer to the above adopted Norfolk GIRAM Strategy and our recent discussions in relation to requirements for off-site enhancement of GI (EGI).

The Norfolk GIRAM Strategy identifies green infrastructure (GI) provision as being essential to divert and deflect the daily recreational visits away from the sensitive Habitats Sites, and their rare species, in order to avoid adverse effects on the integrity of these sites from all the individual developments alone.

In relation to EGI the aim is to provide areas attractive enough for local recreational use on or near where new homes are built. Council officers have assessed existing provision of accessible natural greenspaces close to the development site. This network of spaces provides informal recreational opportunities for residents living in this part of the city but enhancement is required to address the additional need generated by large scale residential growth in this location. Set out in the tables attached to this letter, are the details of EGI schemes for Gildencroft and Wensum Parks. These green spaces have been selected having regard to location and recreational opportunities each provides. In both cases the schemes seek to improve public access and enhance the natural greenspace qualities of the parks. These improvements are required to ensure local GI provision is capable of diverting additional recreational trips generated by new development away from sensitive Habitat Sites. The table includes costings for each scheme, the council will seek the payment of the total EGI scheme cost through a S106 Obligation. The sum will be index linked.

If you have questions please do not hesitate to contact me.

Yours sincerely

Tracy Armitage
Senior Planner

Wensum Park Green Infrastructure projects and costs, part of mitigation to protect Norfolk's Natura 2000 Sites

Objectives	Project	Justification / Benefit	Estimated Costs					
			Item	Supplier	Number	Measurement	Cost	Total
	Wensum Park							
Objective 1. Improve local recreational use of Wensum Park	Additional seating (bench and picnic) along the river frontage	Facilitate visitors spending time in the park - particularly in locations closer to nature.	Recycled plastic bench	Tables Archives - Marmax Recycled Plastic Products - Manufactured in the UK (marmaxproducts.co.uk)	2	No. of benches	420	840
			Installation, hard standing pad, bench bolted to pad		2	No of pads	500	1000
			Recycled plastic seat	Street Furniture Archives - Marmax Recycled Plastic Products - Manufactured in the UK (marmaxproducts.co.uk)	2	No. of benches	400	800
			Installation, hard standing pad, bench bolted to pad		2	No of pads	500	1000
							Total	3640
	Ensure residents have information about local recreational opportunities	Signage: Walking routes between the site, Marriott's Way and Wensum Park	Custom made wooden way marker finger posts (we did a similar project for the Yare Valley Way photos available)		6	Finger posts	200	1200
			Installation costs		6	Per finger post	100	600
			Way marker discs designed to promote the walking route, fixed onto a recessed hole on the end of the finger posts	Fitzpatrick Woolmer - Leading Signage Company & Sign Manufacturer UK (fwdp.co.uk)	1	One off fee for approx. design and 100 disc	350	350
							Total	2150

	Ensure residents have information about local recreational opportunities	Visitor Information at park entrances	Interpretation boards	Fitzpatrick Woolmer - Leading Signage Company & Sign Manufacturer UK (fwdp.co.uk)	3	Interpretation panels	1,500	4500
			Design costs		3	Per board	750	2250
			Installation costs		3	Per board	100	300
							Total	7050
Objective 2. Restoration, enhancement and connection of the city's green infrastructure network	Production of conservation and management plan for the site	Identify options for the restoration/enhancement of the park's semi-natural habitats and future management practices in order to improve the quality, range and long term resilience of habitats.	Management plan	Norwich Fringe Project	1	One off fee	2000	2000
							Total	2000
	GI - Restoration, enhancement programme	Implementation priority projects in the of the conservation and management plan	New riverside type one granite path	Contractor	130	(Per) Metre	50	6500
			Wildflower meadow creation	Contractor	1	One off fee	3,500	3500
			10 year maintenance costs for wildflower meadow ring fenced	Contractor	1	One off fee	10,000	10000
			Tree Planting	Contractor	1	One off fee	2,500	2500
			5 year maintenance costs for tree planting ring fenced	Contractor	1	One off fee	3,000	3000
							Total	25500
Overall total								40340


APPENDIX 16

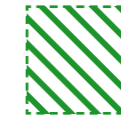
Indicative Green Infrastructure Improvement Plans

Indicative Wensum Park Improvements Plan:



Key:

 **Wensum Park Boundary**

 **Woodland** - Selectively thin the woodland and open area. Replant the new trees. Use felled timber logs to strenghten the edge of ornamental pond and bridge.

 **New Path**

 **New Bridge**

 **Ornamental Pond & Ditch**

 **Cornice Alder / Willow Trees on bank of River Wensum**

 **New Picnic Bench (2 no.)**

 **New Bench (2 no.)**

 **New Wildflower Meadow** - (1500 m²) Planted and maintained

 **New Path**

 **New Trees** - Planted and maintained

 **New Visitor Information Interpretation Boards**

NCC Improvement Project

Additional Improvements - WH Funded

Indicative Gildencroft Park Improvements Plan:




Key:

 **Gildencroft Park Boundary**

 **New Picnic Bench**

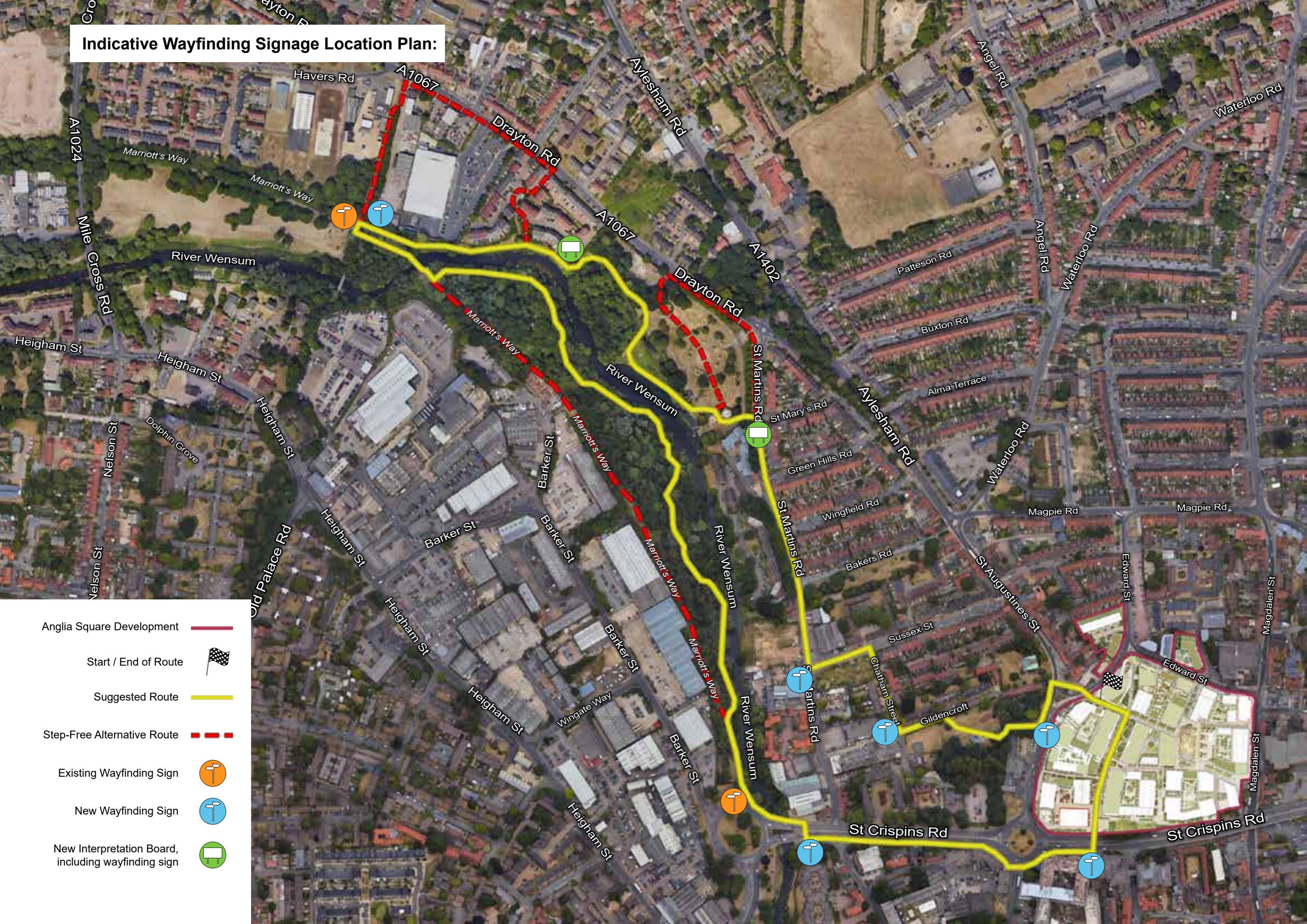
 **New Bench**

 **New Wildflower Meadow - (1500 m²) Planted and maintained**

 **New Trees - Planted and maintained**

Additional Improvements - WH Funded

Indicative Wayfinding Signage Location Plan:



- Anglia Square Development 
- Start / End of Route 
- Suggested Route 
- Step-Free Alternative Route 
- Existing Wayfinding Sign 
- New Wayfinding Sign 
- New Interpretation Board, including wayfinding sign 

APPENDIX 17

Water Usage Calculations for Proposed Development



Job no:	ENV00001-ANFGL-049
Date:	Dec-22
Assessor name:	Hattie Brown
Registration no:	N/A
Development name:	WH179 Anglia Square, Norwich
Issue Date:	22/12/2022

Rainwater

Greywater

Results

WATER EFFICIENCY CALCULATOR FOR NEW DWELLINGS
 (for use with the Code for Sustainable Homes issues Wat 1 for the May 2009 and subsequent versions)

Dwelling Description	Private/DMS - 2 bathrooms, 450 dishwasher, Gen2 specification
-----------------------------	---

1st step - Select from options below:

Is a Rain and/or Greywater system specified?	No
Is a shower AND bath present?	Yes
Has a washing machine been specified?	Yes
Has a dishwasher been specified?	Yes

2nd step - Build spreadsheet (click button below)

BUILD SPREADSHEET

As soon as this button is pressed the spreadsheet will change according to the options selected previously in the 1st step. Scroll down to see the changes.

3rd step - Enter consumption details for the specified fittings

TAPS <small>(excluding kitchen taps)</small>	Fitting type	Flow rate (litres/min)	Number of fittings
1	Sundream + Restrictor	3.00	1
2			
3			
4			
Proportionate flow rate (litres/min)			2.10

		Consumption / person / day (Litres)	6.32
BATHS			
	Fitting type	Capacity to overflow (litres)	Number of fittings
1	Fascino S00918	225.00	1
2			
3			
4			
Proportionate capacity to overflow (litres)			157.50
		Consumption / person / day (Litres)	24.75
SHOWERS			
	Fitting type	Flow rate (litres/min)	Number of fittings
1	Over Bath . Raindance & Hand Held +	5.00	2
2	ES . Raindance /Hand Held + Restrictor	8.00	3
3			
4			
Proportionate flow rate (litres/min)			5.60
		Consumption / person / day (Litres)	29.72
DISHWASHER			
	Fitting Type	Litres per place setting	Number of fittings
1	Zanussi ZSLN1211	1.10	1
2			
3			
4			
Proportionate litres per place setting			0.77
		Consumption / person / day (Litres)	3.96
WASHING MACHINES			
	Fitting Type	Litres per kilogram of dry load	Number of fittings
1	Zanussi Z716WT83BI	6.43	1

2			
3			
4			
Where no washing machines have been specified but plumbing for future supply of grey/rainwater was installed, please enter details:			
	Proportionate of litres/kg of dry load		4.50
	Consumption / person / day (Litres)		13.50

WC's	Fitting Type	Flush Type	Volume**	Number of fittings
1	RAK FSO4RAK82TF	Full Flush	6.00	1
		Part Flush	3.00	
2		Full Flush		
		Part Flush		
3		Full Flush		
		Part Flush		
4		Full Flush		
		Part Flush		
		Average effective flushing volume (litres)		3.99
		Consumption / person / day (Litres)		17.64

KITCHEN SINK TAPS		Fitting Type	Flow rate (litres/minute)	Number of fittings
1	Fascino + Restrictor		5.00	1
2	Fascino boiling water tap		5.68	1
3				
4				
		Proportionate flow rate (litres/min)		3.98
		Consumption / person / day (Litres)		12.71

WASTE DISPOSAL UNIT	
Is a waste disposal unit specified for the dwelling?	No
	Consumption / person / day (Litres)
	0.00

WATER SOFTENER		
Water Softener in use?	No	
Total capacity used per regeneration (%)		
Water consumed per regeneration (litres)		
Average number of regeneration cycles per day (No.)		
Number of occupants served by the system (No.)		
Water consumed beyond 4% person / day (Litres)		0.00

4th step - Analyse Results [Go to Start](#)

INTERNAL WATER CONSUMPTION		
NET INTERNAL WATER CONSUMPTION	(litres/person/day)	108.60
RAINWATER ONLY COLLECTION SAVING	(litres/person/day)	0.00
GREYWATER ONLY RECYCLING SAVING	(litres/person/day)	0.00
RAIN/GREYWATER COLLECTION SAVING (combined system)	(litres/person/day)	0.00
NORMALISATION FACTOR	(litres/person/day)	0.91
TOTAL WATER CONSUMPTION	(litres/person/day)	98.8
CSH CREDITS ACHIEVED		3
CSH MANDATORY LEVEL:		Level 3/4

17. K COMPLIANCE		
EXTERNAL WATER USE	(litres / person / day)	5.00
TOTAL WATER CONSUMPTION	(litres / person / day)	103.8
17. K COMPLIANCE?		Yes

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Job no:	ENV00001-ANGL-049
Date:	Dec-22
Assessor name:	Hattie Brown
Registration no:	N/A
Development name:	WH179 Anglia Square, Norwich
Issue Date:	22/12/2022

Rainwater

Greywater

Results

WATER EFFICIENCY CALCULATOR FOR NEW DWELLINGS
 (for use with the Code for Sustainable Homes issues Wat 1 for the May 2009 and subsequent versions)

Dwelling Description	Private/DMS - 2 bathrooms, 600 dishwasher, Gen2 specification
-----------------------------	---

1st step - Select from options below:

Is a Rain and/or Greywater system specified?	No	
Is a shower AND bath present?	Yes	
Has a washing machine been specified?	Yes	
Has a dishwasher been specified?	Yes	

2nd step - Build spreadsheet (click button below)

BUILD SPREADSHEET

As soon as this button is pressed the spreadsheet will change according to the options selected previously in the 1st step. Scroll down to see the changes.

3rd step - Enter consumption details for the specified fittings

	TAPS (excluding kitchen taps)	Fitting type	Flow rate (litres/min)	Number of fittings
1		Sundream + Restrictor	3.00	1
2				
3				
4				
		Proportionate flow rate (litres/min)		2.10

		Consumption / person / day (Litres)	6.32
BATHS			
		Fitting type	Capacity to overflow (litres)
	1	Fascino S00918	225.00
	2		
	3		
	4		
		Proportionate capacity to overflow (litres)	157.50
		Consumption / person / day (Litres)	24.75
SHOWERS			
		Fitting type	Flow rate (litres/min)
	1	Over Bath, Hand Held/Raindance + Ernstite	5.00
	2	Raindance/Body Jet/Hand Held	8.00
	3		
	4		
		Proportionate flow rate (litres/min)	5.60
		Consumption / person / day (Litres)	29.72
DISHWASHER			
		Fitting Type	Litres per place setting
	1	Zanussi ZDLN1511	0.76
	2		
	3		
	4		
		Proportionate litres per place setting	0.53
		Consumption / person / day (Litres)	2.74
WASHING MACHINES			
		Fitting Type	Litres per kilogram of dry load
	1	Zanussi Z716WT83BI	6.43

2			
3			
4			
Where no washing machines have been specified but plumbing for future supply of grey/rainwater was installed, please enter details:			
	Proportionate of litres/kg of dry load		4.50
	Consumption / person / day (Litres)		13.50

WC's	Fitting Type	Flush Type	Volume**	Number of fittings
1	RAK FSO4RAK82TF	Full Flush	6.00	1
		Part Flush	3.00	
2		Full Flush		
		Part Flush		
3		Full Flush		
		Part Flush		
4		Full Flush		
		Part Flush		
		Average effective flushing volume (litres)		3.99
		Consumption / person / day (Litres)		17.64

KITCHEN SINK TAPS		Fitting Type	Flow rate (litres/minute)	Number of fittings
1	Fascino Sink Tap + Restrictor	5.00	1	
2	Fascino boiling water tap	5.68	1	
3				
4				
		Proportionate flow rate (litres/min)		3.98
		Consumption / person / day (Litres)		12.71

WASTE DISPOSAL UNIT	
Is a waste disposal unit specified for the dwelling?	No
	Consumption / person / day (Litres)
	0.00

WATER SOFTENER		
Water Softener in use?	No	
Total capacity used per regeneration (%)		
Water consumed per regeneration (litres)		
Average number of regeneration cycles per day (No.)		
Number of occupants served by the system (No.)		
Water consumed beyond 4% person / day (Litres)		0.00

4th step - Analyse Results [Go to Start](#)

INTERNAL WATER CONSUMPTION		
NET INTERNAL WATER CONSUMPTION	(litres/person/day)	107.38
RAINWATER ONLY COLLECTION SAVING	(litres/person/day)	0.00
GREYWATER ONLY RECYCLING SAVING	(litres/person/day)	0.00
RAIN/GREYWATER COLLECTION SAVING (combined system)	(litres/person/day)	0.00
NORMALISATION FACTOR	(litres/person/day)	0.91
TOTAL WATER CONSUMPTION	(litres/person/day)	97.7
CSH CREDITS ACHIEVED		3
CSH MANDATORY LEVEL:		Level 3/4

17. K COMPLIANCE		
EXTERNAL WATER USE	(litres / person / day)	5.00
TOTAL WATER CONSUMPTION	(litres / person / day)	102.7
17. K COMPLIANCE?		Yes

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Job no:	ENV01-ANGL-049
Date:	16/122022
Assessor name:	Hattie Brown
Registration no:	N/A
Development name:	WH179 Anglia Square, Norwich
Issue Date:	Dec-22

Rainwater

Greywater

Results

WATER EFFICIENCY CALCULATOR FOR NEW DWELLINGS
 (for use with the Code for Sustainable Homes issues Wat 1 for the May 2009 and subsequent versions)

Dwelling Description	Rental & SO - 1 or 2 bathrooms, Gen2 specification
-----------------------------	--

1st step - Select from options below:

Is a Rain and/or Greywater system specified?	No	
Is a shower AND bath present?	Yes	
Has a washing machine been specified?	No	
Has a dishwasher been specified?	No	

2nd step - Build spreadsheet (click button below)

BUILD SPREADSHEET

As soon as this button is pressed the spreadsheet will change according to the options selected previously in the 1st step. Scroll down to see the changes.

3rd step - Enter consumption details for the specified fittings

TAPS <small>(excluding kitchen taps)</small>	Fitting type	Flow rate (litres/min)	Number of fittings
1	Methven Motu MTBCP	4.00	1
2			
3			
4			
Proportionate flow rate (litres/min)			2.80

	Consumption / person / day (Litres)		7.90
BATHS			
	Fitting type	Capacity to overflow (litres)	Number of fittings
	1	Sandringham 21	139.00
	2		
	3		
	4		
	Proportionate capacity to overflow (litres)		
	Consumption / person / day (Litres)		15.29
SHOWERS			
	Fitting type	Flow rate (litres/min)	Number of fittings
	1	Methven Hand or Overhead	6.00
	2		
	3		
	4		
	Proportionate flow rate (litres/min)		
	Consumption / person / day (Litres)		26.22
DISHWASHER			
Where no dishwasher is specified, a default consumption figure of 1.25 litres per place setting is used.			
	Consumption / person / day (Litres)		4.50
WASHING MACHINES			
Where no washing			Number of fittings

machine is specified, a default consumption figure of 8.17 litres per kilogram of dry load is used.	
Where no washing machines have been specified but plumbing for future supply of grey/rainwater was installed, please enter details:	

Consumption / person / day (Litres)	17.16
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WC's	Fitting Type	Flush Type	Volume**	Number of fittings
1	Sandringham 21	Full Flush	6.00	1
		Part Flush	4.00	
2		Full Flush		
		Part Flush		
3		Full Flush		
		Part Flush		
4		Full Flush		
		Part Flush		
Average effective flushing volume (litres)				4.66

Consumption / person / day (Litres)	20.60
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KITCHEN SINK TAPS		Fitting Type	Flow rate (litres/minute)	Number of fittings
1	Bianco Daras	11.30	1	
2				
3				
4				

Proportionate flow rate (litres/min)	7.91
--------------------------------------	------

Consumption / person / day (Litres)	15.33
-------------------------------------	-------

WASTE DISPOSAL UNIT

Is a waste disposal unit specified for the dwelling?	No
--	----

Consumption / person / day (Litres)	0.00
-------------------------------------	------

WATER SOFTENER		
Water Softener in use?	No	
Total capacity used per regeneration (%)		
Water consumed per regeneration (litres)		
Average number of regeneration cycles per day (No.)		
Number of occupants served by the system (No.)		
Water consumed beyond 4% person / day (Litres)		0.00

4th step - Analyse Results [Go to Start](#)

INTERNAL WATER CONSUMPTION		
NET INTERNAL WATER CONSUMPTION	(litres/person/day)	107.00
RAINWATER ONLY COLLECTION SAVING	(litres/person/day)	0.00
GREYWATER ONLY RECYCLING SAVING	(litres/person/day)	0.00
RAIN/GREYWATER COLLECTION SAVING (combined system)	(litres/person/day)	0.00
NORMALISATION FACTOR	(litres/person/day)	0.91
TOTAL WATER CONSUMPTION	(litres/person/day)	97.4
CSH CREDITS ACHIEVED		3
CSH MANDATORY LEVEL:		Level 3/4

17. K COMPLIANCE		
EXTERNAL WATER USE	(litres / person / day)	5.00
TOTAL WATER CONSUMPTION	(litres / person / day)	102.4
17. K COMPLIANCE?		Yes

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Date:	Dec-22
Assessor name:	Hattie Brown
Registration no:	N/A
Development name:	WH179 Anglia Square, Norwich
Issue Date:	22/12/2022

Rainwater

Greywater

Results

WATER EFFICIENCY CALCULATOR FOR NEW DWELLINGS
 (for use with the Code for Sustainable Homes issues Wat 1 for the May 2009 and subsequent versions)

Dwelling Description	Private/DMS 1 bathroom, 600 dishwasher, Gen2 specification
-----------------------------	--

1st step - Select from options below:

Is a Rain and/or Greywater system specified?	No
Is a shower AND bath present?	Yes
Has a washing machine been specified?	Yes
Has a dishwasher been specified?	Yes

2nd step - Build spreadsheet (click button below)

BUILD SPREADSHEET

As soon as this button is pressed the spreadsheet will change according to the options selected previously in the 1st step. Scroll down to see the changes.

3rd step - Enter consumption details for the specified fittings

TAPS <small>(excluding kitchen taps)</small>	Fitting type	Flow rate (litres/min)	Number of fittings
1	Sundream + Restrictor	3.00	1
2			
3			
4			
Proportionate flow rate (litres/min)			2.10

		Consumption / person / day (Litres)	6.32
BATHS			
	Fitting type	Capacity to overflow (litres)	Number of fittings
1	Fascino S00918	225.00	1
2			
3			
4			
Proportionate capacity to overflow (litres)			157.50
		Consumption / person / day (Litres)	24.75
SHOWERS			
	Fitting type	Flow rate (litres/min)	Number of fittings
1	Over Bath. Hand Held/Raindance + Restrictor	5.00	2
2			
3			
4			
Proportionate flow rate (litres/min)			3.50
		Consumption / person / day (Litres)	21.85
DISHWASHER			
	Fitting Type	Litres per place setting	Number of fittings
1	Zanussi ZDLN1511	0.76	1
2			
3			
4			
Proportionate litres per place setting			0.53
		Consumption / person / day (Litres)	2.74
WASHING MACHINES			
	Fitting Type	Litres per kilogram of dry load	Number of fittings
1	Zanussi Z716WT83BI	6.43	1

2			
3			
4			
Where no washing machines have been specified but plumbing for future supply of grey/rainwater was installed, please enter details:			
	Proportionate of litres/kg of dry load		4.50
	Consumption / person / day (Litres)		13.50

WC's	Fitting Type	Flush Type	Volume**	Number of fittings
1	RAK FSO4RAK82TF	Full Flush	6.00	1
		Part Flush	3.00	
2		Full Flush		
		Part Flush		
3		Full Flush		
		Part Flush		
4		Full Flush		
		Part Flush		
		Average effective flushing volume (litres)		3.99
		Consumption / person / day (Litres)		17.64

KITCHEN SINK TAPS		Fitting Type	Flow rate (litres/minute)	Number of fittings
1	Fascinco + Restrictor		5.00	1
2	Fascinco boiling water tap		5.68	1
3				
4				
		Proportionate flow rate (litres/min)		3.98
		Consumption / person / day (Litres)		12.71

WASTE DISPOSAL UNIT	
Is a waste disposal unit specified for the dwelling?	No
	Consumption / person / day (Litres)
	0.00

WATER SOFTENER		
Water Softener in use?	No	
Total capacity used per regeneration (%)		
Water consumed per regeneration (litres)		
Average number of regeneration cycles per day (No.)		
Number of occupants served by the system (No.)		
Water consumed beyond 4% person / day (Litres)		0.00

4th step - Analyse Results [Go to Start](#)

INTERNAL WATER CONSUMPTION		
NET INTERNAL WATER CONSUMPTION	(litres/person/day)	99.51
RAINWATER ONLY COLLECTION SAVING	(litres/person/day)	0.00
GREYWATER ONLY RECYCLING SAVING	(litres/person/day)	0.00
RAIN/GREYWATER COLLECTION SAVING (combined system)	(litres/person/day)	0.00
NORMALISATION FACTOR	(litres/person/day)	0.91
TOTAL WATER CONSUMPTION	(litres/person/day)	90.6
CSH CREDITS ACHIEVED		3
CSH MANDATORY LEVEL:		Level 3/4

17. K COMPLIANCE		
EXTERNAL WATER USE	(litres / person / day)	5.00
TOTAL WATER CONSUMPTION	(litres / person / day)	95.6
17. K COMPLIANCE?		Yes

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Job no:	ENV00001-ANGL-049
Date:	Dec-22
Assessor name:	Hattie Brown
Registration no:	N/A
Development name:	WH179 Anglia Square, Norwich
Issue Date:	22/12/2022

Rainwater

Greywater

Results

WATER EFFICIENCY CALCULATOR FOR NEW DWELLINGS
 (for use with the Code for Sustainable Homes issues Wat 1 for the May 2009 and subsequent versions)

Dwelling Description	Private/DMS 1 bathroom, 450 dishwasher, Gen2 specification
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1st step - Select from options below:

Is a Rain and/or Greywater system specified?	No	
Is a shower AND bath present?	Yes	
Has a washing machine been specified?	Yes	
Has a dishwasher been specified?	Yes	

2nd step - Build spreadsheet (click button below)

BUILD SPREADSHEET

As soon as this button is pressed the spreadsheet will change according to the options selected previously in the 1st step. Scroll down to see the changes.

3rd step - Enter consumption details for the specified fittings

TAPS (excluding kitchen taps)	Fitting type	Flow rate (litres/min)	Number of fittings
1	Sundream Basin + Restrictor	3.00	1
2			
3			
4			
	Proportionate flow rate (litres/min)		2.10

		Consumption / person / day (Litres)	6.32
BATHS			
	Fitting type	Capacity to overflow (litres)	Number of fittings
1	Fascino S00918	225.00	1
2			
3			
4			
Proportionate capacity to overflow (litres)			157.50
		Consumption / person / day (Litres)	24.75
SHOWERS			
	Fitting type	Flow rate (litres/min)	Number of fittings
1	Over Bath. Hand Held/Raindance + Restrictor	5.00	2
2			
3			
4			
Proportionate flow rate (litres/min)			3.50
		Consumption / person / day (Litres)	21.85
DISHWASHER			
	Fitting Type	Litres per place setting	Number of fittings
1	Zanussi ZSLN1211	1.10	1
2			
3			
4			
Proportionate litres per place setting			0.77
		Consumption / person / day (Litres)	3.96
WASHING MACHINES			
	Fitting Type	Litres per kilogram of dry load	Number of fittings
1	Zanussi Z716WT83BI	6.43	1

2			
3			
4			
Where no washing machines have been specified but plumbing for future supply of grey/rainwater was installed, please enter details:			
	Proportionate of litres/kg of dry load		4.50
	Consumption / person / day (Litres)		13.50

WC's	Fitting Type	Flush Type	Volume**	Number of fittings
1	RAK FSO4RAK82TF	Full Flush	6.00	1
		Part Flush	3.00	
2		Full Flush		
		Part Flush		
3		Full Flush		
		Part Flush		
4		Full Flush		
		Part Flush		
		Average effective flushing volume (litres)		3.99
		Consumption / person / day (Litres)		17.64

KITCHEN SINK TAPS		Fitting Type	Flow rate (litres/minute)	Number of fittings
1	Fascino Sink Tap + Restrictor	5.00	1	
2	Fascino boiling water tap	5.68	1	
3				
4				
		Proportionate flow rate (litres/min)		3.98
		Consumption / person / day (Litres)		12.71

WASTE DISPOSAL UNIT	
Is a waste disposal unit specified for the dwelling?	No
	Consumption / person / day (Litres)
	0.00

WATER SOFTENER		
Water Softener in use?	No	
Total capacity used per regeneration (%)		
Water consumed per regeneration (litres)		
Average number of regeneration cycles per day (No.)		
Number of occupants served by the system (No.)		
Water consumed beyond 4% person / day (Litres)		0.00

4th step - Analyse Results [Go to Start](#)

INTERNAL WATER CONSUMPTION		
NET INTERNAL WATER CONSUMPTION	(litres/person/day)	100.73
RAINWATER ONLY COLLECTION SAVING	(litres/person/day)	0.00
GREYWATER ONLY RECYCLING SAVING	(litres/person/day)	0.00
RAIN/GREYWATER COLLECTION SAVING (combined system)	(litres/person/day)	0.00
NORMALISATION FACTOR	(litres/person/day)	0.91
TOTAL WATER CONSUMPTION	(litres/person/day)	91.7
CSH CREDITS ACHIEVED		3
CSH MANDATORY LEVEL:		Level 3/4

17. K COMPLIANCE		
EXTERNAL WATER USE	(litres / person / day)	5.00
TOTAL WATER CONSUMPTION	(litres / person / day)	96.7
17. K COMPLIANCE?		Yes

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ECOLOGYSOLUTIONS

Part of the ES Group

Ecology Solutions Limited | Cokenach Estate | Barkway | Royston | Hertfordshire | SG8 8DL

01763 848084 | east@ecologysolutions.co.uk | www.ecologysolutions.co.uk