Dated 22nd January 2024 ~~2023~~

(1) **CATHERINE THERESA STEELE**

(2) **GEORGE JOSEPH RICE AND CHLOE MICHELLE RICE**

(3) **BARCLAYS BANK PLC**

(4) **HORSHAM DISTRICT COUNCIL**

AGREEMENT

under Section 106 of the Town and Country Planning Act 1990 in respect of land adjacent to Raydon, Lordings Lane, West Chiltington, RH20 2QU and 16 Riverside, Codmore Hill, Pulborough RH20 1FJ

Lauren Kelly
Interim Head of Legal and Democratic Services
Horsham District Council
Parkside
Chart Way
Horsham
West Sussex
RH12 1RL

Legal Ref: SMS/2697

This Agreement is made as a deed and dated 22nd January 2024 ~~2023~~

Between:

(1) **CATHERINE THERESA STEELE** of Raydon, Lordings Lane, West Chiltington, Pulborough RH20 2QU ("the Owner");

(2) **GEORGE JOSEPH RICE AND CHLOE MICHELLE RICE** of 16 Riverside, Codmore Hill, Pulborough, RH20 1FJ ("the Third Party Landowners");

(3) **BARCLAYS BANK PLC** (Co. Regn. No. 9740322) whose registered office is 1 Churchill Place, London E14 5HP ("the Mortgagee"); and

(4) **HORSHAM DISTRICT COUNCIL** of Parkside, Chart Way, Horsham, West Sussex RH12 1RL ("the Council")

1. Background & Recitals

Whereas

1.1 The Owner is the registered proprietor with Title Absolute of the Site registered at HM Land Registry under title number WSX290171.

1.2 The Third Party Landowners are the registered proprietors of the Offsetting Land registered at HM Land Registry under title number WSX322056.

1.3 The Mortgagee is the registered proprietor of the charge dated 20 June 2014 referred to in entry numbers 3 and 4 of the charges register of title number WSX322056.

1.4 The Council is the local planning authority as defined in the Act for the area within which the Site is situated for the purposes of this Agreement and for the purposes of section 106 of the Act.

1.5 The Owner submitted the Application dated 23 December 2021 to the Council and it was validated by the Council on 30 December 2021.

1.6 The Council is minded to grant planning permission for the Development subject to this Agreement in order to secure the necessary planning obligations.

1.7 The Council's administrative area is situated in an area of serious water stress as identified by the Environment Agency's Water Stressed Areas Classification.

1.8 The water statutory undertaker, Southern Water, supplies drinking water to the Council's administrative area from the SNWSZ.

1.9 In September 2021 Natural England released the Position Statement which requires that any new development within the SNWSZ must be Water Neutral. The parties agree that the Development must be Water Neutral and the Owner and the Third Party Landowners have entered into this Agreement in order to secure the required mitigation and Offsetting Measures in order to bind the Site and the Offsetting Land

1.10 The Owner, the Third Party Landowners and the Mortgagee are willing to enter into, be bound by the obligations and be subject to the restrictions in this Agreement on the terms set out herein.

1.11 The parties are satisfied that the provisions of this Agreement comply with the requirements of regulation 122 of the Community Infrastructure Levy Regulations 2010 (as amended) and, accordingly, that the planning obligations contained in this Agreement are necessary to make the Development acceptable in planning terms, are directly related to the Development and fairly and reasonably relate in scale and kind to the Development.

NOW THIS AGREEMENT WITNESSES as follows:

2 **INTERPRETATION**

In this Agreement:

2.1 Words importing the one gender include reference to all the genders.

2.2 Words importing the singular include the plural and vice versa.

2.3 Words importing persons include companies and corporations and vice versa.

2.4 Any words following the terms including, include, in particular, for example or any similar expression shall be construed as illustrative and shall not limit the sense of the words, description, definition, phrase or term preceding those.

2.5 Wherever there is more than one person named as a party and where more than one party undertakes an obligation, all their obligations can be enforced against all of them jointly and against each individually.

2.6 Any reference to a clause, schedule, paragraph or plan is to a clause, schedule, paragraph or plan in, to or attached to this Agreement, unless expressly stated otherwise.

2.7 Any reference to a colour or letter is to a colour or letter on the plans attached to this Agreement.

2.8 In the absence of contrary provision, any reference to a statute includes any statutory modification or re-enactment of it and every statutory instrument, direction, specification made or issued under the statute or deriving validity from it.

2.9 A reference to writing or written excludes fax and email.

2.10 An obligation on a party not to do something includes an obligation not to allow that thing to be done.

2..11 References to any party to this Agreement shall include the successors in title to that party and to any person deriving title through or under that party and, in the case of the Council, the successors to their functions as local planning authority.

2.12 The headings are for reference only and shall not affect construction.

3 DEFINITIONS

It is hereby agreed between the parties set out in this Agreement that the following expressions have the following meanings:

"Act"	means the Town and Country Planning Act 1990 as amended;
"Application"	means the application number DC/21/2875 for the erection of 1no two-storey dwelling with hard and soft landscaping and parking provision;
"Commencement of Development	means the carrying out of a material operation as defined in section 56(4) of the Act in respect of the Development but excluding (for the purposes of this Agreement and for no other purpose) any operation relating to works of investigations in respect of land contamination or remedial action in respect thereof, enabling works demolition, site clearance works, earthworks, archaeological investigations and digs, exploratory boreholes, operations permitted by the Town and Country Planning (General Permitted Development) Order 2015, the erection of hoardings and fencing, temporary diversion of services and signage (including the formation of temporary construction accesses) and "Commence Development" shall be construed accordingly;
"Commencement Date"	means the date on which the Commencement of the Development occurs;
"Commencement Notice"	means the written notice confirming the Commencement Date referred to in clause 7.1.1 and served in accordance with Clause 7.3;
"Development"	means the development of the Site pursuant to the Planning Permission;

"Development Site Plan"	means the plan attached to this Agreement at Schedule 1;
"Monitoring Fee"	means the fee of £375 payable to the Council for monitoring obligations in the Agreement and which is payable under the provisions of regulation 122 of the Community Infrastructure Regulations 2010, section 111 of the Local Government Act 1972 and section of the Localism Act 2011;
"Occupation"	means occupation for any purpose for which the Planning Permission has been granted by the Council other than occupation for the purposes of construction or fitting out or occupation for security, marketing or display and "Occupy" and "Occupied" shall be construed accordingly;
"Occupation Notice"	means the written notice confirming the Occupation Date referred to in Clause 7.1.2 and served in accordance with Clause 7.3;
"Offsetting Land"	means the land at 16 Riverside, Codmore Hill, Pulborough RH20 1FH shown for identification purposes edged red on the Offsetting Land Plan;
"Offsetting Land Plan"	means the plan attached to this Agreement at Schedule 2;
"Offsetting Measures"	means the detailed water saving measures that are to be implemented on the Offsetting Land in order to make the Development Water Neutral;
"Planning Permission"	means the planning permission to be granted by the Council pursuant to the Application;
"Position Statement"	means the statement dated 14th September 2021 received by the Council from Natural England which shows that water abstraction for drinking water supplies in the SNWSZ is having a negative impact on the wildlife sites in the Arun Valley;
"Section 73 Consent"	means a planning permission granted pursuant to section 73 of the Act which varies and/or removes any condition subject to which the Planning Permission and/or such planning permission pursuant to section 73 of the Act was granted;
"Site"	means the land adjacent to Raydon, Lordings Lane, West Chiltington, Pulborough RH20 2QU shown for identification purposes edged red on the Development Site Plan;

"SNWSZ"	means the Sussex North Water Supply Zone from which Southern Water supplies drinking water;
" Water Neutral"	means the use of water in the SNWSZ after the Development has taken place is the same or lower than it was before the Development so as to accord with the Position Statement and "Water Neutrality" shall be construed accordingly;
"Water Neutrality Statement"	means the statement prepared by Aegaea Limited dated 24 June 2022 and agreed with the Council to demonstrate and ensure that the Development is considered and delivered as Water Neutral and in accordance with the Position Statement by setting out key mitigation measures to achieve Water Neutrality and which appears at Schedule 3;
"Water Neutrality Strategy"	means the strategy submitted to and approved by the Council as part of the conditions of the Planning Permission setting out the precise Offsetting Measures to be undertaken on the Offsetting Land in order to achieve the water reduction targets set out in the Water Neutrality Statement;
"Water Stressed Areas Classification"	means the Environment Agency's report dated 1st July 2021 setting out the results of the Environment Agency's determination of areas of water stress in England and any subsequent report;
"Working Day"	means Monday to Friday inclusive but excluding any day that is a bank holiday or statutory holiday.

4. **ENABLING PROVISIONS**

This Agreement is made pursuant to section 106 of the Act, section 111 of the Local Government Act 1972, section 1 of the Localism Act 2011 and all other enabling powers.

5. **CONDITIONS PRECEDENT**

5.1 This Agreement shall come into effect upon the date hereof but the provisions in paragraphs 3, 4 and 5 of Schedule 4 and Schedule 5 shall only take effect upon the Commencement of Development.

6. **COVENANTS**

6.1 The Owner covenants with the Council to fully comply with and to perform the obligations contained herein and in Schedule 4 of this Agreement in accordance with the requirements and timescales set out.

6.2 The Owner covenants with the Council that the Development and use of the Site shall be in strict accordance with this Agreement.

6.3 The Third Party Landowners covenant with the Council to fully comply with and to perform the obligations contained herein and in Schedule 5 of this Agreement in accordance with the requirements and timescales set out.

7. NOTICES

7.1 The Owner covenants with the Council as follows:

7.1.1 to give the Commencement Notice to the Council not less than 14 (fourteen) days before the anticipated Commencement Date; and

7.1.2 to give the Occupation Notice to the Council not less than 14 (fourteen) days before the anticipated Occupation Date.

7.2 The parties to this Agreement agree that if the Owner fails to give the notice required by clause 7.1.1 and clause 7.1.2 above then the Council shall be entitled in its absolute discretion to determine the Commencement Date and Occupation Date and shall give notice to the Owner of the Council's determination.

7.3 Any notice, certificate or other communication required or permitted to be given under this Agreement shall be given in writing to the relevant party at the relevant address referred to at the start of this Agreement or such other address as may be notified in writing to the other party and must be served personally or by first class registered or first class recorded delivery post and, in the case of the Council, the relevant party shall address any notice to the Head of Legal and Democratic Services of the Council.

7.4 Any notice, certificate or other communication sent by post shall be deemed (in the absence of evidence of receipt) to have been delivered 2 (two) Working Days after despatch and in proving the fact of despatch it shall be sufficient to show that the envelope was properly addressed and posted.

7.5 Any notice, certificate or other communication delivered personally shall be deemed to have been delivered at the time it is received provided it is received between 0900 and 1700 on a Working Day but otherwise it shall be deemed to have been received on the next Working Day.

8. COSTS

The Owner undertakes to pay on or before the date hereof the Council's reasonable legal costs incurred in preparing and entering into this Agreement and the planning officer fee of £375.

9. MORTGAGEE'S CONSENT

9.1 The Mortgagee consents to the completion of this Agreement and declares that its interest in the Offsetting Land shall be bound by the terms of this Agreement as if it had been executed and registered as a land charge prior to the creation of the Mortgagee's interest in the Offsetting Land.

9.2 The Mortgagee shall not be personally liable for any breach of the obligations in this Agreement unless committed or continuing at a time when the Mortgagee is in possession of all or any part of the Offsetting Land.

10. GENERAL

The parties undertake that:

10.1 this Agreement constitutes a planning obligation for the purposes of section 106 of the Act, section 111 of the Local Government Act 1972, section 1 of the Localism Act 2011 and any other enabling powers.

10.2 this Agreement constitutes a deed;

10.3 this Agreement is enforceable by the Council in accordance with section 106 of the Act; and

10.4 nothing in this Agreement confers or is intended to confer a benefit on a third party under the Contracts (Rights of Third Parties) Act 1999.

10.5 It is hereby agreed by the Owner and the Third Party Landowners that failure by the Council at any time to enforce the provisions of this Agreement or to require performance strictly or otherwise by the Owner or Third Party Landowners of any of the conditions, covenants, agreements or obligations of this Agreement or any failure or delay by the Council to exercise any act, right or remedy shall not be construed as a creating an estoppel in connection with any such condition, covenant, agreement or obligation and shall not affect the validity of this Agreement or any part thereof or the right of the Council to enforce any provision and any variation of this Agreement shall not vitiate the remainder of the Agreement which shall remain in full force and effect subject to such amendment or amendments.

10.6 The Owner and the Third Party Landowners hereby undertake that:

10.6.1 this Agreement supersedes and replaces all previous negotiations whether oral or written;

10.6.2 the Owner has not relied on any express or implied statement warranty representation or undertaking given by or on behalf of the Council; and

10.6.3 nothing herein contained excludes the liability of any party in relation to fraud.

10.7 The Owner and Third Party Landowners acknowledge that this Agreement will be registered as a local land charge.

10.8 The Owner hereby gives consent for the Development Site Plan to be reproduced by the Council.

10.9 If any provision in this Agreement shall be held to be invalid, illegal or unenforceable the validity, legality and enforceability of the remaining provisions hereof shall not in any way be deemed thereby to be affected or impaired.

10.10 This Agreement shall be governed by and interpreted in accordance with laws of England and the parties submit to the exclusive jurisdiction of the courts of England.

10.11 The obligations in this Agreement (with the exception of clause 8) shall cease to have effect (insofar only as it has not already been complied with) if, before the Commencement of Development, the Planning Permission:

10.11.1 expires;

10.11.2 is varied or revoked other than at the request of the Owner; or

10.11.3 is quashed following a successful legal challenge

but will remain in full force and effect so far as any subsisting Section 73 Consent is concerned.

10.12 The Owner (or any person deriving title to the Site from them) shall not be liable for any breach of the restrictions and obligations set out in this Agreement where such breach arises after the Owner has parted with their interest in the Site or such part of the Site to which such breach relates save in respect of liability for antecedent breach of this Agreement.

10.13 The Third Part Landowners (or any person deriving title to the Offsetting Land from them) shall not be liable for any breach of the restrictions and obligations set out in this Agreement where such breach arises after the Third Party Landowner has parted with their interest in the Offsetting Land or such part of the Offsetting Land to which such breach relates save in respect of liability for antecedent breach of this Agreement.

10.14 Section 33 of the Local Government (Miscellaneous Provisions) Act 1982 applies to the covenants in this agreement.

10.15 References to the Site and Offsetting Land include any part of it.

10.16 Any covenant by the Owner or Third Party Landowners not to do any act or thing includes a covenant not to permit or allow the doing of that act or thing.

10.17 Nothing in this Agreement shall prohibit or limit the right to develop any part of the Site in accordance with any planning permission (other than the Planning Permission or any modification variation or amendment thereof) granted after the date of the Planning Permission

10.18 Subject to the proviso to this clause if any Section 73 Consent is granted after the date of this Agreement:

10.18.1 the obligations in this Agreement shall relate to and bind such Section 73 Consent; and

10.18.2 the definitions of Application, Development and Planning Permission (other than for the purposes of clause 1) shall be construed to include reference to (respectively) the planning application for the Section 73 Consent, the development permitted by the Section 73 Consent and the Section 73 Consent itself

PROVIDED THAT:

10.18.3 nothing in this clause shall fetter the discretion of the Council in determining any planning application for a Section 73 Consent and the appropriate planning obligations required in connection with the determination of the same;

10.18.4 to the extent that any of the obligations in this Agreement have already been discharged at the date that a Section 73 Consent is granted they shall remain discharged for the purposes of the Section 73 Consent; and

10.18.5 the Council reserves the right to insist upon the completion of a separate planning obligation by deed of agreement in connection with any Section 73 Consent if the Council (acting reasonably) considers it desirable to do so.

11. DISPUTE RESOLUTION

11.1 Should a dispute or difference arise between the Owner or Third Party Landowners and the Council concerning anything herein then the provisions of of this clause 11 shall apply.

11.2 All differences and disputes which may arise between the parties concerning this Agreement shall be referred to the determination (as an expert and not as an arbitrator) of an independent leading conveyancing/planning counsel agreed upon by the parties but in default of such agreement appointed by the President of the Law Society of England and Wales on the application of any of the parties.

11.3 Any expert appointed pursuant to clause 11.2 shall:

11.3.1 on his appointment serve written notice thereof on the parties in dispute;

11.3.2 consider any written representations by or on behalf of those parties which are received by him within 20 (twenty) Working Days of such service and immediately forward a copy of the written representation of one party to the other party;

11.3.3 allow the parties to the dispute an opportunity of commenting in writing on the other party's representations within 20 (twenty) working days of receipt by the other party thereof;

11.3.4 have an unfettered discretion to determine the reference to him;

11.3.5 serve notice of his determination as soon as he has made it;

11.3.6 give full and clear reasons for his decision; and

11.3.7 be paid his proper fee and expenses in connection with such reference by the parties in dispute in equal shares or in such shares as he may determine and his determination shall be final and binding on the parties in dispute (save in the case of manifest error) PROVIDED THAT if any such expert shall die, become insolvent or of unsound mind or if any of the parties in dispute shall serve on him written notice in their opinion he has unreasonably delayed making his determination he shall be ipso facto discharged and be entitled only to his reasonable expenses prior to such discharge and another person shall be appointed in his place as such expert.

11.4 The provisions of this clause shall not affect the ability of the Council to apply for and be granted any of the following: declaratory relief, injunction, specific performance, payment of any sum, damages, and any other means of enforcing this Agreement and consequential and interim orders and relief.

12. OWNERSHIP

12.1 The Owner warrants that no person other than the Owner has any legal or equitable interest in the Site.

12.2 The Third Party Landowners warrant that no person other than the Third Party Landowner and the Mortgagee has any legal or equitable interest in the Offsetting Land.

12.3 The Owner and the Third Party Landowners undertake to the Council to give the Council immediate written notice of any change in the ownership of any of their respective interests in the Site and/or the Offsetting Land occurring before all the obligations under this Agreement have been discharged such notice to give details of the transferee's full name and registered office (if a company or usual address if not) together with the area of the Site or Offsetting Land purchased by reference to a plan.

IN WITNESS whereof this Agreement has been duly executed the day and year first hereinbefore mentioned

EXECUTED as a **DEED** by
CATHERINE THERESA STEELE [redacted]

in the presence of: [redacted]

Name of witness [redacted]

Address of witness Bermingham Lodge, Lordings Lane, West Chiltington RH20 2QU

EXECUTED as a **DEED** by
GEORGE JOSEPH RICE [redacted]

in the presence of: [redacted]

Name of witness [redacted]

Address of witness
7 MULBERRY COURT
GUILDFORD
SURREY
GU4 7EQ.

EXECUTED as a **DEED** by
CHLOE MICHELLE RICE [redacted]

in the presence of: [redacted]

Name of witness [redacted]

Address of witness 25 PARTRIDGE WAY
WICKHAM
PO17 6BQ

EXECUTED as a **DEED** by
BARCLAYS BANK PLC

in the presence of:

Name of witness [redacted]

Address of witness [redacted]

Signed for and on behalf of BARCLAYS BANK UK PLC by
as duly appointed Attorney under a Power of Attorney
dated 14/12/22 in the presence of
Witness

Mortgage Services
PO Box 8575
Leicester , LE18 9AW

SEALED WITH THE COMMON SEAL of
HORSHAM DISTRICT COUNCIL
in the presence [redacted]

Authorised Officer

17810 x4

Schedule 1
The Development Site Plan



[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Mortgage Services
PO Box 8575
Leicester , LE18 9AW

PROPOSED HOUSE adjacent to 'RAYDON'.
LORDINGS LANE . WEST CHILTINGTON .
for MR & MRS RICE

Site area: 0.10ha

SITE PLAN 1:250 ON A3 . SEPT. 2021 0 5 10M

Revision D:27.10.21 Tree survey information incorporated E:5.11.21 Landscaping altered, boundary amended F: 8.11.21 Footpath shown

D1905.3F

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Schedule 2
Offsetting Land Plan

HM Land Registry
Official copy of title plan

Title number **WSX322056**
Ordnance Survey map reference **TQ0519NW**
Scale **1:1250 enlarged from 1:2500**
Administrative area **West Sussex : Horsham**

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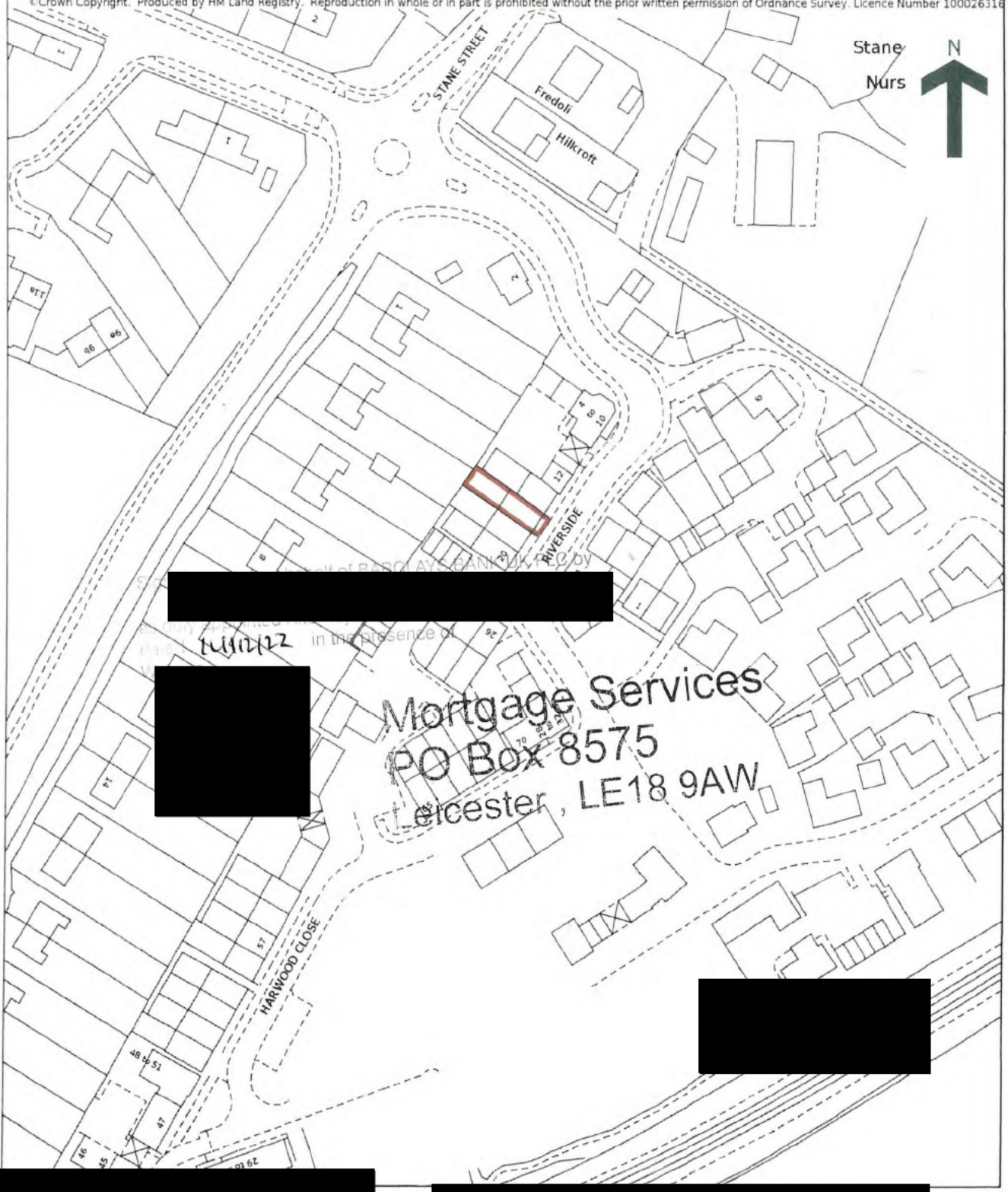

Schedule 3
Water Neutrality Statement







Water Neutrality Statement

Site Address: Land off of Raydon, Lordings Lane, West Chiltington, West Sussex

aegaea

Flood risk, water and environment

UK Experts in Flood Modelling, Flood Risk Assessments, and Surface Water Drainage Strategies

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Document Issue Record

Project: Water Neutrality Statement

Reference: AEG0319_RH10_Poundhill_07_WNS

Date: 24/06/2022

Site Location: Land off of Raydon, Lordings Lane, West Chiltington, West Sussex (DC/21/2875

Proposed Development: Construction of a single two-bedroom dwelling

Please Note:

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Flood risk, water and environment

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Water Neutrality Statement

The calculations in this document show that the consumption of wholesome water by persons occupying the new dwelling could be 52.97 litres per person per day(l/p/d) with rainwater harvesting which is less than 85 l/p/d required by Horsham District Council for new developments and in accordance with Natural England Position Statement regarding Water Neutrality.

The new dwelling l/p/d has been calculated in accordance with the methodologies set out in Appendix A 'Water Efficiency Calculator for New Dwellings' of The Building Regulations Approved Document G.

To establish a baseline for consumption of wholesome water for persons occupying the existing dwelling an average rate of 135 l/p/d has been used. Occupancy rates for both existing and new dwellings have been used to calculate dwelling wholesome water consumption in litres per day(l/d).

To achieve neutrality the total wholesome water consumption of the existing and new dwellings shall not exceed the water consumption of the existing dwelling as is i.e., prior to retrofit.

The existing property to be retrofitted is 16 Riverside, Pulborough RH20 1FH, which is a 3-bedroom property. The proposed dwelling will be a 2-bedroom property.

Through discussions with Horsham District Council, they have advised that this approach is acceptable and in accordance with Horsham District Council and Natural England guidance.

Calculations are included in this document, see Appendix 2, to show the potential for offsetting the wholesome water consumption of the new dwelling by reducing the wholesome water consumption of the existing dwelling by retrofit to achieve neutrality.

This document indicates the maximum flow rates, averaged where more than one unit, from the proposed appliances for the new dwelling. If during the development of the new dwelling the appliances are changed the calculation is recommended to be resubmitted.

Note the actual water consumption will vary depending on the actual behavior of the occupants throughout the dwelling. This is discussed and recognised in the 'Water Efficiency Calculator for 'New Dwellings' of The Building Regulations Approved Document G.

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Table A1 - Appliances (New Dwelling)

Installation	Number	Units of Measure	Manufacturer
WC (Dual Flush)	3	2.66l	Roca 4.0l/2.0l
Taps (excluding kitchen/ utility room taps)	6	4l/min	Storm
Bath	1	170l	Prestige
Shower	2	3.5l/min	Triton
Kitchen/Utility Room Taps	2	6l/min	Storm
Washing Machine	1	5.13l/kg	Beko
Dishwasher	1	0.92l/place setting	Indesit
Rain Water	1	As required to offset wholesome water usage.	Aquaco
Grey water	1	As required to offset wholesome water usage.	Aquaco

Supporting Comments to Table A1

1)WC (Dual Flush)- the average capacity (2.66l) stated above is derived by multiplying the number of units (3) by the manufactures stated dual flush capacity (4.0l*0.33 +2.0l*0.67) for each unit and dividing the total capacity by the number of units (3).

2)Taps (excluding kitchen/utility room)- the average flow(4l/min) stated above is derived by multiplying the number of units (6) by the manufactures maximum stated flow rate (4l/min) for each unit and dividing the total flow by the number of units (6).

3)Bath - capacity stated above(170l) is the total capacity to overflow as stated by the manufacturer.

4)Bathroom taps are excluded as already taken into account in use factor for baths.

5)Shower – the average flow (3.5l/min) stated above is derived by multiplying the number of units (2) by the by the manufacturers maximum stated flow rate (3.5l/min) for each unit and dividing the total flow by the number of units (2).

6)Kitchen/Utility Room Taps - the average flow(6l/min) stated above is derived by multiplying the number of units (2) by the manufactures maximum stated flow rate(6l/min) for each unit and dividing the total flow by the number of units (2).

7)Washing machine - the capacity (5.13l/kg) stated above is derived by dividing the manufacturers stated water usage (according to the energy label 41l) by the load(8kg).

8)Dishwasher - the capacity (0.92l/place setting) stated above is derived by dividing the manufacturers stated water usage (according to the energy label 12l) by the place settings (13).

9)Appliance manufactures data is included in Appendix 1.

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Table A2 -Water Efficiency Calculator (New Dwelling)

		(1)	(2)	(3)	(4)
Installation Type	Unit of Measure	Capacity/flow rate	Use Fac-tor	Fixed use (litres/per-son/day)	Litres/person/day= [(1)x(2)+(3)]
WC (single flush)	Flush volume (litres)	0	4.42	0	0
WC (dual flush)	Full flush volume (litres)	4	1.46	0	5.84
	Part flush volume (litres)	2	2.96	0	5.92
WC (multiple fittings)	Average effective flushing volume (litres)	0	4.42	0	0
Taps (excluding kitchen/utility room taps)	Flow rate (litres/minute)	4	1.58	1.58	7.90
Bath (where shower also present)	Capacity to overflow (litres)	170	0.11	0	18.70
Shower (where bath also present)	Flow rate (litres/minute)	3.5	4.37	0	15.30
Bath only	Capacity to overflow (litres)	0	0.5	0	0
Shower only	Flow rate (litres/minute)	0	5.6	0	0
Kitchen/utility room taps	Flow rate (litres/minute)	6	0.44	10.36	13.00
Washing Machine	Litres/kg dry load	5.13	2.1	0	10.77
Dishwasher	Litres/place setting	0.92	3.6	0	3.31
Waste disposal unit	Litres/use (If present = 1. If absent = 0)	0	3.08	0	0
Water softener	Litres/person/day	0	1	0	0
	(5) Total calculated use (litres/person/day) = (Sum column 4)				80.74
	(6) Contribution from greywater (litres /person/day)				0
	(7) Contribution from rainwater (litres /person/day) See Note 1				22.53
	(8) Normalisation factor				0.91
	(9) Total water consumption (litres/person/day) = [(5)-(6)-(7)]x8				52.97
	(10) External water use (litres/person/day) See Note 2				0
	(11) Total water consumption= (9)+(10) (litres/person/day)				52.97

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Notes

1) External water use consumes 5l/p/d (Row 10). As Row 10 is below Row 7, is it not factored in the rainwater contribution 22.53 l/p/d (Row 7) which provides WC (11.76l/p/d) and washing machine (10.77l/p/d), the WC l/p/d and washing machine l/p/d are subject to multiplication by the Normalisation factor (Row 8).

2) External water use (5l/p/d) is provided from rainwater harvesting. Total rain water harvesting contribution (Row 7 + 5 l/p/d) is 27.53l/p/d made up of WC (11.76l/p/d), washing machine (10.77l/p/d and external water use(5l/p/d).

Conclusion

New Dwelling

Rainwater harvested from the roof could reduce wholesome water consumption to 52.97 l/p/d. See Appendix 1.2 for rain water harvesting/storage calculation.

Grey water recycling is not considered required at this stage as there is sufficient rain water available from rain water harvesting to meet demand.

Existing Dwelling

Water neutrality is potentially feasible in the existing dwelling by retrofitting the following;

Showers – Flow Limiters or replacement

Rainwater Harvesting to be distributed to external water use and washing machines only.

For more details and calculations see Appendix 2.

We trust that the information in this letter provides the required information needed to address Natural England Position Statement on Water Neutrality.

Should there be any questions, please do not hesitate to contact us.

Kind regards,

Daniel Cook BSc (Hons) MSc C.WEM MCIWEM

Principal Flood Risk Consultant and Director

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Appendix 1.1 - Proposed Appliances

Roca The Gap Rimless Dual Flush Cistern 4/2 Litres - 34173C000



Features

- Dimensions (HxWxD): 405 x 365 x 140mm
- Dual Flush - 4 or 2 Litres
- Quick & easy to install
- Made of Vitreous China
- Supplied with fixing kit
- 25 Years manufacturer guarantee

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Prestige Alpha Gripped Rectangular Bath 1675mm x 700mm Single Ended



Bath Type	Standard
Bath Shape	Rectangular
Bath Configuration	Single Ended
Length	1675mm
Width	700mm
Bath Internal Length Top	1445mm
Bath Internal Width Top	520mm
Bath Internal Length Bottom	1060mm
Bath Internal Width Bottom	450mm
Bath Total Height	510mm
Bath Internal Depth	345mm-330mm
Bath Thickness	5mm
Capacity	170 Litres

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TRITON

See you first thing Britain

TRITON T80 EASI-FIT + WHITE / CHROME 8.5KW ELECTRIC SHOWER



SPECIFICATION

Brand	Triton
Cable Entry Points	Top, Bottom, Left, Right & Rear
Colour	White / Chrome
Fixings Supplied	Fixings & Fittings Supplied
Manufacturer Guarantee	2 Year Manufacturer's Guarantee (T&Cs Apply)
Max. Shower Flow Rate	3.5 Ltr/min
Maximum Bar Pressure	10 bar
Max Water Temperature	47 °C
Min. Shower Flow Rate	3.5 Ltr/min
Minimum Bar Pressure	1 bar
Mixer Type	Manual
Model Name	T80 Easi-Fit +
Pack Size	1
Parent Colour	White
Pieces in Pack/Case	1
Power Output (Watts/Kw)	8.5 kW
Product Depth	101 mm
Product Height	333 mm
Product Type	Electric Shower

Product Width	225 mm
Range Name	T80
Shower Head Shape	Round
Shower Head Size	110 mm
Shower Product Type	Electric
Smart Compatibility	Not Smart
Temperature Control Type	Rotary Temperature Control
Total Product Weight	3.10 kg
Water Entry Points	Top, Bottom, Left, Right & Rear
Water Failure Shutdown	Automatic

STROM TOUCH & FLOW TAP FLOW RESTRICTOR & AERATOR



SPECIFICATION

With adjustable flow rate that can be adapted between 3Ltr/min and 8Ltr/min dependent upon incoming mains pressure. Outlet design provides optimum presentation for medium flow rate applications. Quick and easy installation with no specialist tools required.

Adjustable Flow Rate	Adjustable Flow Rate
Aerator Thread Type	M24x1 Male Thread
Brand	Strom
Fixings Supplied	Fixings Not Required
Manufacturer Guarantee	1 Year Guarantee
Max. Flow Rate	8.0 Ltr/min
Min. Flow Rate	3.0 Ltr/min
Model Name	Maxi Flow
Model No	SSFR30LM
Pack Size	1
Pieces in Pack/Case	1
Product Type	Tap Flow Restrictor & Aerator

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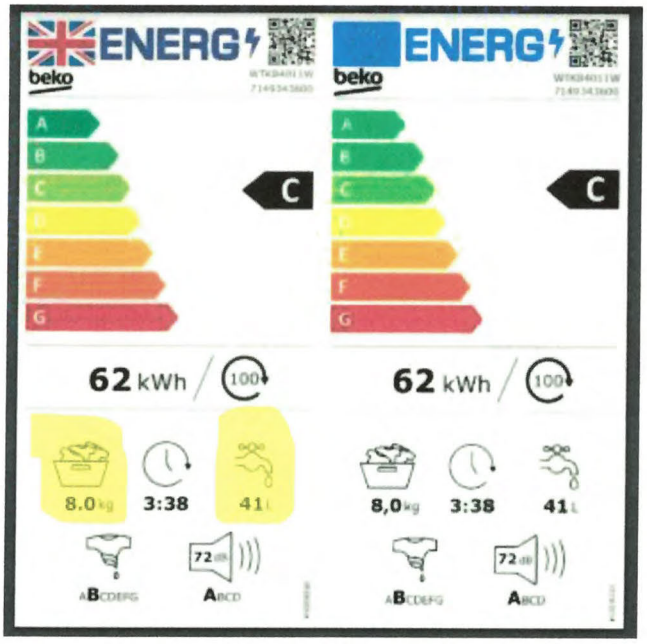
BEKO Recycled Tub WTK84011W 8 kg 1400 Spin Washing Machine - White





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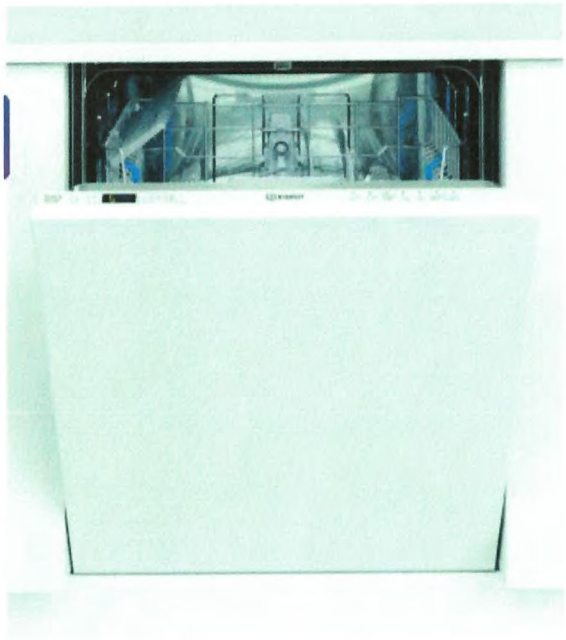
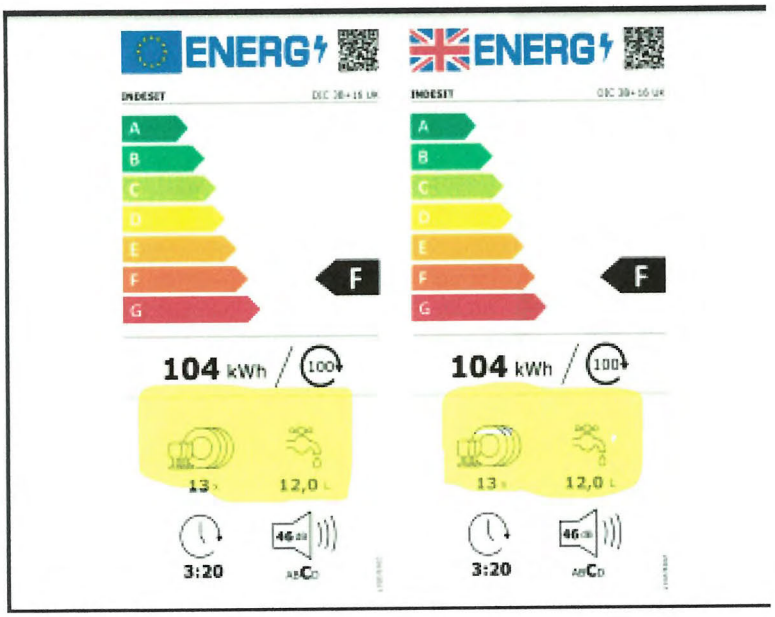
INDESIT DIC 3B+16 UK Full-size Fully Integrated Dishwasher





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Appendix 1.2 - Rain Water Collection/Storage

Rainwater Collection

Calculation based on an occupancy of 3

Rainwater collection calculation – BS 8515 intermediate approach

(a) Collection area (m2) – approx. 95m2

(b) Yield coefficient and hydraulic filter efficiency e.g. 0.7

(c) Rainfall (average mm/year) – 833.69/year

(d) Daily rainwater collection (litres) = [(a) x (b) x ((c)/365)

95 x 0.7 x (833.69/365) = 151.89l/d

(e) Number of occupants - 3

(f) Daily rainwater per person (litres) = (d)/(e)

151.89/3 = 50.63l/p/d

Rain Water Storage

Calculation based on an occupancy of 3

Rainwater storage calculation – BS8515 intermediate approach based on non – potable water demand (less than rainwater yield)

(a)Rainwater demand = 27.53l/p/d (WC (11.76l/p/d) +Washing Machine (10.77l/p/d) +External Water Use (5.0l/p/d))

(b)Drought storage capacity = 35 days

(c)Number of occupants = 3

(d)Storage capacity = (a)x(b)x(c)

27.53 x 35 x 3 = 2890.65 (F-line 5000l flat tank). 5000l recommended as per recommendation in the accompanying Surface Water Drainage Strategy.

Notes

1)Assumed number of occupants = 3 (2 in first bedroom, 1 in each subsequent bedroom)

2)Rainfall (average mm/year) from Met Office Climate Station Charlwood (1991-2020)

3)Storage capacity in accordance with BS8515 intermediate approach is 5% (18 days) of the annual rainwater yield or the non- potable water demand whichever is the lesser. Horsham District Council require 35 days drought storage capacity which for this development equates to 2890.65 litres as per calculation above and to meet with the current guidance is to be prefilled before occupation sourcing water from outside of the restriction zones

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F-Line Shallow Dig Tanks

Making Rainwater Harvesting An Even Better Idea



Sizes Available

1500 L
3000 L
5000 L
7500 L

The F-line 5000L flat tank, with lockable cover and shaft is one of the most popular tanks in the UK. With its 25 year warranty, sump for pump location, and childproof lock.

Size	Length	Width	Height Tank Body	Height inc 235mm Entrance shaft	Weight	Inflow	Overflow
1500 Litre	2400mm	1200mm	650mm	1015mm	80kg	330mm	385mm
3000 Litre	2400mm	2400mm	650mm	1015mm	170kg	330mm	385mm
5000 Litre	2960mm	2220mm	920mm	1350mm	250kg	330mm	385mm
7500 Litre	3340mm	2310mm	1125mm	1415mm	310kg	325mm	375mm

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Appendix 1.3 – Proposed Layout of New Dwelling and location of RWH tank

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