Selling Agent

OLIVER HUME

villawood properties

Communities Designed for Living

South East Water

AQUAREVO

LYNDHURST

DESIGN GUIDELINES

Version 17 – May 2019

CONTENTS

1. INTRODUCTION

Welcome to Aquarevo

Villawood Properties and South East Water (SEW) are thrilled to collaborate on Aquarevo, a sustainable housing community that's on track to set a new benchmark for residential living through its integrated approach to water management.

Developing your new home is an exciting time and we hope you enjoy the process.

The principle aim of these Design Guidelines ("Guidelines") is to ensure that all homes at Aquarevo are built to a high standard while encouraging a variety of housing styles which are in harmony with the streetscape.

Each individual house design should contribute to the surrounding environment and to the estate in a positive way. These Guidelines encourage you to construct innovative and appropriate designs that address sustainability features and present a cohesive residential image for the estate.

The Guidelines will also assist in providing you with peace of mind that your investment will be enhanced in the future, guarding against inappropriate development that may detract from the attractiveness or value of the estate.

On target to become Australia's most water efficient urban housing development

Aquarevo will be an exemplary residential development that demonstrates the principles of integrated water cycle management and energy efficiency in a suburban context.

The aim of Aquarevo is to integrate water sources like rainwater and recycled water into each home to minimise demand on the city's drinking water supply; to better support the environment during storm events; and allow you to monitor water use in your home.

Sustainable energy production and consumption is a major focus for Aquarevo where all residents in the estate will be required to install a minimum of 3kW solar system. In addition, each home will be future proofed for future battery storage to ensure that your home can utilise solar power as an all-day resource.

These systems will be mandatory for all residences.

To complement the Guidelines, we encourage homes to be built with the benefit of Villawood Properties' Green Savings Calculator and Positive Change initiative.

The Green Savings Calculator is a helpful online tool for those who are looking to build a new home and offers a useful and cost-effective tool to help you save water, energy and money.

To learn more about the Positive Change program and ideas you can incorporate into your new home, please visit our website: www.villawoodpostivechange.com.au.

In addition to the above Aquarevo is an 'EnviroDevelopment' project and to see how these sustainable initiatives have been incorporated into your new home please refer to page 40 or visit www.envirodevelopment.com.au.

We hope you will see the value in these Guidelines for Aquarevo and we look forward to working with you throughout the exciting process of making Aquarevo your home.

1.1 OPERATION OF THE DESIGN GUIDELINES

The Design Assessment Panel ("DAP") will be formed to oversee the implementation of the Guidelines. It will comprise an architect and a representative from Villawood Properties. The makeup of the panel may be varied. However, the panel will always include at least one architect.

All proposed building works including houses, garages, outbuildings and fencing shall be approved by the DAP prior to seeking a planning permit (if required) and a building permit.

Swimming pools do not require DAP approval; however specific requirements exist where SEW should be contacted prior to building.

In considering designs, the DAP may exercise discretion to waive or relax a requirement. The Guidelines are subject to change by the developer at any time without notice. All decisions regarding these Guidelines are at the discretion of the DAP.

Preliminary designs and enquiries are welcome to ensure compliance with your guidelines and it is recommended that you provide a copy of the design guidelines to your builder at the earliest possible time.

1.2 CONSTRUCTION OF YOUR HOME

Incomplete building works must not be left for more than three months without work being carried out and all building works must be completed within 12 months of starting.

Figure 1. The Aquarevo Home

1.3 SUMMARY OF WATER AND ENERGY INITIATIVES

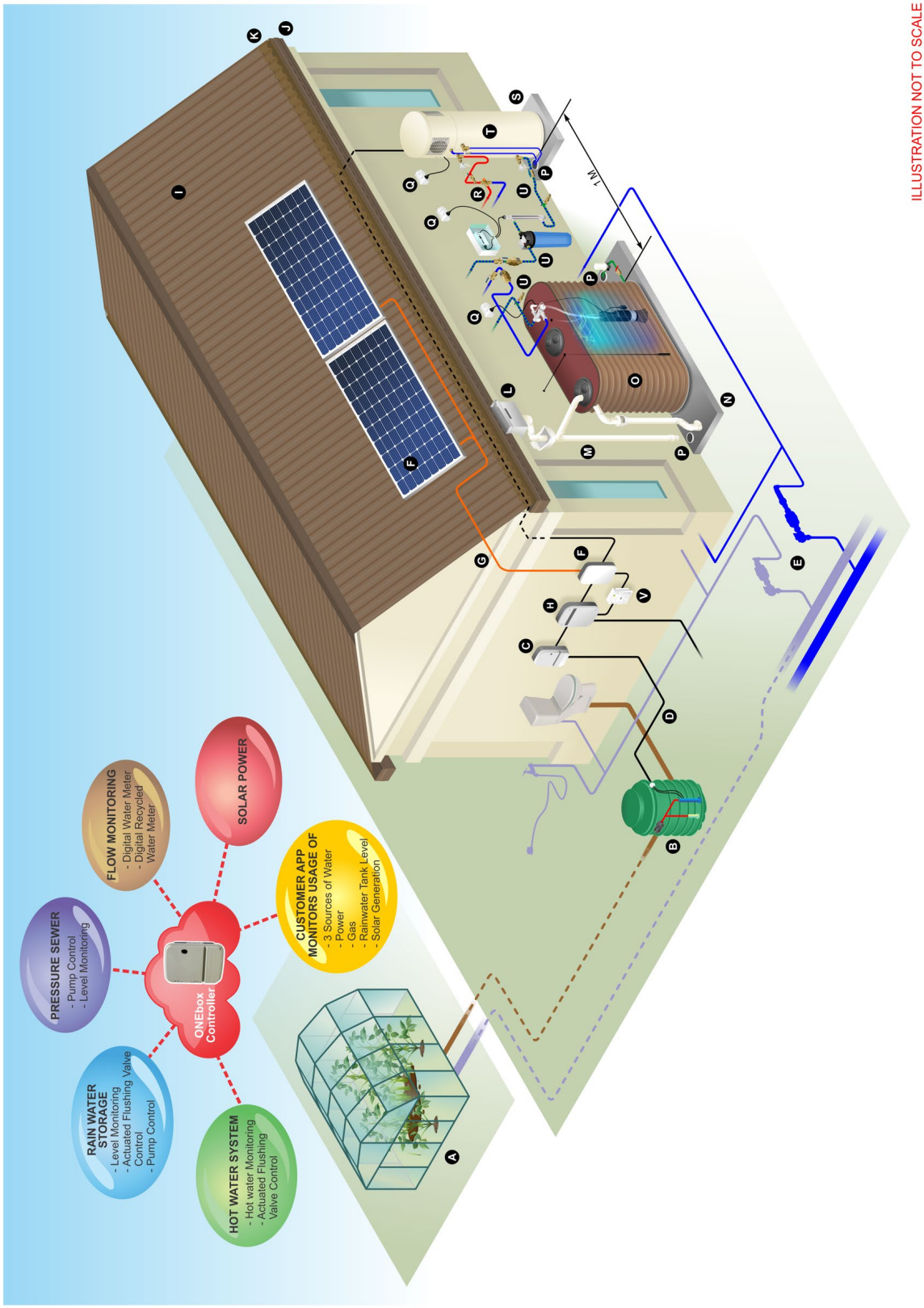


Figure 2. Water and energy initiatives

Table 1. Build Process Order including Water and Energy Initiatives

*Please note that the key phases of construction are shown **bold**.*

Order of Work	Item Ref. Fig.2	Component	Works By	Action	Outcome
1		Builder Design Assistance House plan pre-DAP approval	Builder Designer, SEW & Design Assessment Panel (DAP)	Builder House Designer submits, to the DAP, initial house design which considers various Aquarevo initiatives. **Note** please refer to the project Builder Portal for the pre-DAP approval checklist for detail on what is to be shown on plans for pre-approval. DAP carries out an initial review and forwards design to SEW to review roof/rainwater catchment design. SEW reply with comments to DAP within 2 business days. Builder Designer revises design, considering SEW feedback on roof catchment design and DAP comments, and re-submits to the DAP for approval. DAP approves plan and forwards it to SEW.	DAP return comments to builder for Builder Designer to review within 2 business days of receipt of house design.
2		**Formal DAP house design approval**	Builder Designer, DAP & SEW	Builder Designer submits, to the DAP, detailed house design as required by the DGL's to permit building works. Plans to consider various Aquarevo initiatives as outlined within this document including detail on the following; • type of roof (tile or steel) • roof catchment area (square metres) • type, size (cross sectional area in mm) and manufacturers of gutters • colour of rainwater tank • location of gutter stop weirs Plans to be reviewed by DAP in conjunction with SEW. DAP approved plans to be forwarded to SEW upon approval.	SEW initiate stock control required for SEW to install equipment during the build.
3		Single Residential Connection Plumbing Application	Builder & SEW	Builder makes application via SEW Property Connect as per typical house build and include payment of relevant application fees. SEW process application.	SEW issues consent within 5 business days – subject to lot title release.
4	E	Dry Tapping Request / Installations	Builder & SEW	Builder applies via SEW Property Connect - if not requested as part of the Single Residential Connection Plumbing Application (as above). Ensuring water meters will be clear of driveways and other paving.	SEW installs dry tapping's within 5 business days and arranges a Pre-Construction Meeting with builder at a mutually agreed time.
5		Pre-Construction Meeting & Material Delivery	Builder, Builders Plumbers, Builders Electrician & SEW	Builder attends (until confident with process & procedures) and arranges for sanitary plumber, roof plumber and electrician to also attend. SEW Aquarevo Project Manager, Plumbing Works Coordinator, Priority Plumbing Coordinator and Commissioning Engineer to also attend. Builder's plumber confirms that the invert level for connection to the pressure sewer (800mm) is achievable. Builder confirms timing and delivery instructions of SEW provided materials (shown below). Materials for Single Storey Home: • Gutter Guard • Gas Sub/Check Meter(s) – if required Additional Materials for Double Storey Home: • 100mm Downpipe • 2 No. 100mm x 90 degree bends • 2 No. Standoff Clips	Meeting held or if not required, builder has contacted SEW to arrange material delivery. SEW send materials to an agreed location and at an agreed time. Builder takes delivery of materials to install as required.

6	Not Shown	Battery System Location Car Charging Point	Builder Designer	Builder Designer allows (at minimum) a 800mm wide x 1500mm high space next to the solar inverter for possible future battery system installation. Note This includes a provisional location for battery storage, relevant conduits for connection to the Solar PV system and invertor and the OneBox® system in the future. Every home needs to provide appropriate provisions in the garage for future car charging points. This includes electrical conduits and an identified location for a future car charging point on plans.	Battery provider is given clearance required for possible future battery system installation.
7	Not Shown	Main Gas Meter (if gas is to be supplied)	Builder, Builder Designer, SEW & Gas Supplier	Builder provides (capacity/MJ rating) as part of request for “pulse capable” main gas meter” from Gas Supplier at time of service request and pays cost of standard gas meter. SEW bears the additional cost of “pulse capability”. Builder Designer shows main gas meter to be proximate to OneBox® in accordance with APA Drawing Option 2 Version B (see Appendix C). Builder contacts gas supplier to arrange installation (after Building @ Lock Up Stage) of the main gas meter with clearances to any ignition source as per Gas Supplier standards.	Gas Supplier is notified by the builder to install a “pulse capable” main gas meter at an agreed time (after Building @ Lock Up Stage)
8	Not Shown	Gas (sub/check) meter(s) (if gas is to be supplied)	Builder Designer, Builder Plumber & SEW	Builder Designer shows sub/check gas meter(s) proximate to areas within the home where gas will service major gas appliances (continuous flow hot water unit(s), hydronic and/or ducted heating). SEW supplies “pulse capable” sub/check gas meter(s) as arranged at Pre-Construction.	Builders Plumber is issued with “pulse capable” sub/check gas meter(s) as per SEW provided materials.
9	N	Rainwater Tank Slab 780mm wide x 2100mm long x 100mm high	Builder	Builder installs concrete slab using SEW design plans (version C) for dimensions. Slab to finish 50mm above proposed finished ground level.	Concrete Slab is available for Rainwater Tank install.
10	S	Heat Pump Hot Water Unit Slab 780mm wide x 780mm long x 100mm high	Builder	Builder installs concrete slab using SEW design plans (version C) for dimensions. Slab to finish 50mm above proposed finished ground level. Note: Concrete slabs (rainwater tank & heat pump hot water unit) need to be separate slabs to allow for stormwater drainage.	Concrete Slab is available for Heat Pump Hot Water Unit install.
11	P	Stormwater Connection Points	Builders Plumber	Builders Plumber supplies and installs 3 connection points at: 1. Actuating Valve (Rainwater tank overflow) 2. Pressure & Temporary Relief Valve & Condensate Line 3. First Flush Referring to SEW design plans (version E).	Stormwater connection points installed.
12		**Drinking & Recycled Water Lead-In Inspection**	Builders Plumber & SEW Inspector	Builder’s Plumber requests Drinking & Recycled Water Lead-In Inspection via SEW Property Connect. Builder’s plumber is not required to attend inspection.	SEW schedules and carries out inspection. Should any rectification works be required, they are to be completed by the builder’s plumber prior to commissioning stage.
13	Not Shown	Electrical Requirements for OneBox® Dimentions (HxWxD): 350 x 250 x 150mm	SEW Electrician	SEW Electrician to supply and install a 20Amp circuit breaker and connection cable to the pre-determined location of the OneBox® (refer to Item C - OneBox®).	Cables will be grouped into a conduit and attached to the studs of the wall.
14	Q	Electrical Requirements for Rainwater to hot water components	Builders Electrician	Builders Electrician supplies and installs 3 separate circuit single external General Purpose Outlets (GPO’s) to service the Rainwater Tank Pump, UV Water Treatment system and the Hot water unit as per SEW design plans (version C).	3 separate circuit single external GPO’s are installed.

15	V	Electrical Requirements for Mondo™Ubi™ Dimensions (HxWxD): 304 x 300 x 104 mm	Builders Designer & SEW Electrician	Builder's Designer to show location of the Mondo™Ubi™ on plans proximate to electrical meter box. SEW Electrician supplies and installs a 6Amp circuit breaker, current transformers and electrical cable to the pre-determined location of the Mondo™Ubi™. SEW Electrician to commission the Mondo™Ubi™ control system. Where a PV inverter is installed, SEW Electrician to install a communications cable (RS485 or C-Bus) between inverter and Mondo™Ubi™.	Cables will be ready for connection to Mondo™Ubi™.
16	H	Electrical Meter Box	Builders Electrician	Builder's Electrician supplies and installs at a minimum height of 1.2m from the bottom of the meter box to finished ground level.	Electrical meter box is installed.
17	F	Solar Panels & Inverter	Builder, Builders Designer & Solar Supplier	Builder's Designer to show location of solar panels and inverter on plans. Builder to either supply or arrange with owners preferred Solar Supplier. PV System needs to be a minimum of 3kW. Builder/Solar Supplier to ensure PV system and invertor is compatible with Mondo™Ubi™ Builder/Solar Supplier to ensure inverter has a set of dry contacts capable of interfacing with external devices eg. Heat Pump hot water unit and Mondo™Ubi™	Solar Panels and inverter are installed by Builder or Owner preferred Solar Supplier with dry contacts available for connection to other external devices.
18	G	Conduits & Cables from Solar Panels to the Inverter	Solar Supplier	Solar Supplier installs 2 x 25mm HD conduits and cables including sweep bends between roof and inverter location.	Connection is made between the solar panels and the inverter.
19	Shown as solid line	Mondo™Ubi™ Conduits	Builders Designer & SEW Electrician	Builder's Designer to show on plans. SEW Electrician to install 2 x 25mm MD conduits (power and data) between Mondo™Ubi™ location and electrical meter box.	Mondo™Ubi™ is connected for monitoring power and providing feedback data.
20	I	AS4020 Compliant Roof Material	Builder	Builder to supply and install AS4020 compliant roof.	Roof installed.
21	J	Roof Gutters	Builders Plumber	Builder's Plumber to supply and install in accordance with AS/NZS3500.	Roof Gutters installed.
22	K	Gutter Guard	Builders Plumber	SEW supply gutter guard as arranged at Pre-Construction. Builders Plumber to install gutter guard and internal gutter stop weirs to isolate the gutters servicing the rainwater catchment area (Minimum of 100m2) from the remainder of the roof area.	Gutter Guard installed over roof catchment area.
23	L	Rain Head 400mm x 300mm x 250mm with 100mm pop	Builders Plumber	Builder's Plumber to supply and install rain head with appropriately sized overflow to service the rainwater tank.	Rain Head and overflow installed to location shown on house design.
24	M	Downpipe (100mm) as required for Rainwater to Hot Water Tank	SEW Plumber, Builder & Builders Plumber	Single Storey Homes: SEW Plumber supplies and installs 100mm UPVC downpipe. Two Storey Homes: SEW supplies 100mm UPVC (AS4020 compliant) downpipe, bends & clips to Builder as arranged at Pre-Construction. Builder's Plumber to install downpipe, bends & clips between rain head/100mm downpipe outlet and top of rainwater tank, (2m above ground level). Builder to arrange for exposed sections to be painted at time scaffold is in place to ensure OH&S issues are avoided.	Downpipe installed and any exposed sections arranged to be painted.
25		**Rough-In of:** **a) drinking & rainwater/ hot water** **b) gas pipes & fittings** **c) electrical**	Builder / Builders Plumber & SEW Electrician	Builder to provide SEW 5 full business days notification by calling 1800 337 775 or e-mailing aquarevo@sew.com.au to have SEW Electrician provide electrical data cabling (including inverter location to heat pump location and Mondo™Ubi™ location to electrical meter box) for future connection.	SEW installs electrical cable Rough-In for SEW supplied systems within 5 full business days of notification. Builder's Plumber installs all water and gas pipework to Rough-In stage.

				Builder's Plumber to supply and install all internal hot, drinking and recycled water pipework and fittings to fixtures. Hot water, drinking water and rainwater connection points are to be installed as part of SEW design plan (version C). Independent hot water lines from heat pump unit are to be installed to service showers (@ 7 litres per minute), bath(s), laundry trough and washing machine. Must be solid jacketed red pipe and include pipe labels "Rainwater" to the pipework every 300mm. Pipework to and from the "builder supplied" hot water unit is to be in accordance with AS/NZS3500. Builder's Plumber to install gas pipes and fittings to all gas fixtures, including up stand connection points to gas sub/check meters.	
26		**Plumbing Rough-In Inspection**	Builders Plumber & SEW Inspector	Builders Plumber requests the Plumbing Rough-In Inspection via SEW Property Connect, allowing 2 full business days for SEW to inspect. Builder's Plumber is not required to attend inspection.	SEW schedules and carries out inspection of plumbing work within 2 full business days from day requested. Should any rectification works be required, they are to be completed by the Builder's Plumber prior to commissioning stage.
27	B	**Building @ Lock Up Stage &** Pressure sewer tank (pod) including pressure pump	Builder & SEW Pressure Sewer	Builder notifies SEW of building at Lock Up and confirms the finished ground level by calling 1800 337 775 or e-mailing aquarevo@sew.com.au. Builder ensures clear access to allow installation of the pressure sewer and provides protection of the pod after it is installed. SEW schedule and carry out Pressure Sewer installation to location as per drawing (Appendix E), with lid at 50mm above finished ground level, or if not determined, 50mm above footpath level.	SEW schedules and carries out Pressure Sewer installation at a mutually agreed time between the builder and SEW. Builder is responsible to provide protection of the pod from time of installation to handover to customer.
28	If gas is to be supplied to the home	Connection of main gas meter	Builders Plumber	Builders Plumber confirms timing with Gas Supplier for the installation of the gas service pipe and "pulse capable" main gas meter, in accordance with APA Option 2 Drawing (Appendix C - APA Gas Meter Plan).	Service pipe and "pulse capable" main gas meter is installed.
29	If gas is to be supplied to the home	Gas sub/check meter(s) pipework assemblies	Builders Plumber	SEW has supplied "pulse capable" sub/check gas meter(s) as arranged at Pre-Construction. Builders Plumber installs gas meter assemblies and fits gas sub/check meter(s) to each to service the major gas appliances (hot water & heating).	Sub/check "pulse capable" gas meters are installed at each major gas fixture location.
30	Not Shown	Connection of sanitary drains to Pressure Sewer Pod	Builders Plumber	Rewrite Action to read: Builders Plumber installs the internal sanitary drain to 2.4m from front boundary at 1.25m from side boundary at a depth of 800mm within the zoned area for the pressure sewer (refer to Appendix E - Pressure Sewer Pod Offset).	Connection is made to an invert level not exceeding 800mm. SEW receives updated property service plan.
31	U,O,R & T C	**Practical Completion Notification** Filtration System, Rainwater Tank, Tempering Valve and Heat Pump Hot Water Unit OneBox® & Data Connections	Builder, SEW Plumbers, Electrician and Inspector	Builder provides 10 full business days notification to SEW of proposed Practical Completion date by calling 1800 337 775 or e-mailing aquarevo@sew.com.au to enable SEW install and commissioning of items (U,O,R,T & C) and scheduling of Plumbing Commissioning Inspection (Builder's plumber not required to attend). SEW supplies and fits rainwater labels to tap outlets where rainwater is to be used. Builder to carry out any rectification works required from previous SEW inspections by the Practical Completion date.	SEW schedules, installs and commissions items (U,O,R,T & C), rainwater labels fitted to tap outlets and carry out Plumbing Commissioning Inspection within 10 days of the Builder notification and prior to the notified Practical Completion date. Builder has completed any rectification works, if required.

		Plumbing Commissioning Inspection			
32	TBA	Individual Hot Water Unit for kitchen sinks/bars and basins	Builder & Builder's Plumber	Builder's Plumber supplies and installs secondary hot water unit along with all other required connections, pipework, tapware and associated fittings as per site plans and in accordance with appropriate plumbing & electrical standards. Builder forms agreement with the owner confirming the location (not to be visible from the street) and size/capacity of unit.	Hot water unit (size, capacity and location agreed by owner) supplying kitchen sinks/bars and basins is installed.
33		**Handover to Customer**	SEW	SEW schedule a session with the customer to provide information around viewing water, power and gas usage data, ongoing maintenance information, troubleshooting, rainwater usage areas and SEW contact details.	SEW have explained to the customer the initiatives, usage data access and maintenance requirements. SEW have supplied contact details to customer for any troubleshooting. SEW explain to customer where rainwater will be used rainwater labels have been fitted to these tap outlets at commissioning.
34		Compliance Certificate (Plumbing & Electrical)	SEW Plumber & Electrician	SEW Plumbing & Electrical Contractors supply builder with VBA Certificate of Compliance for SEW plumbing and electrical works.	Builder receives Certificate of Compliance for SEW plumbing and electrical works.
35	A	Water Recycling Plant	SEW	SEW arranges construction of Water Recycling Plant at a pre-determined location within final stage of estate.	Water Recycling Plant is operational to service the estate at expected timing of 2020.

All the individual components (labelled U) required to connect rainwater to the heat pump/continuous flow hot water unit are to be supplied and installed by SEW.

Please refer to Figure 2 above for a visual representation of the components/elements outlined above.

1.4 COMPLIANCE WITH GUIDELINES

These Design Guidelines are mandatory. The Contract of Sale entered into, between you and South East Water for your purchase of a lot in Aquarevo requires that you comply with these Design Guidelines. In addition, the restrictive covenant contained in the Plan of Subdivision requires that every owner of a lot in Aquarevo complies with the Design Guidelines at all times.

2. APPROVAL PROCESS

2.1 PROCESS FOR APPROVAL

The process for approval of your house design depends on the size of your lot and the details for your proposed house design.

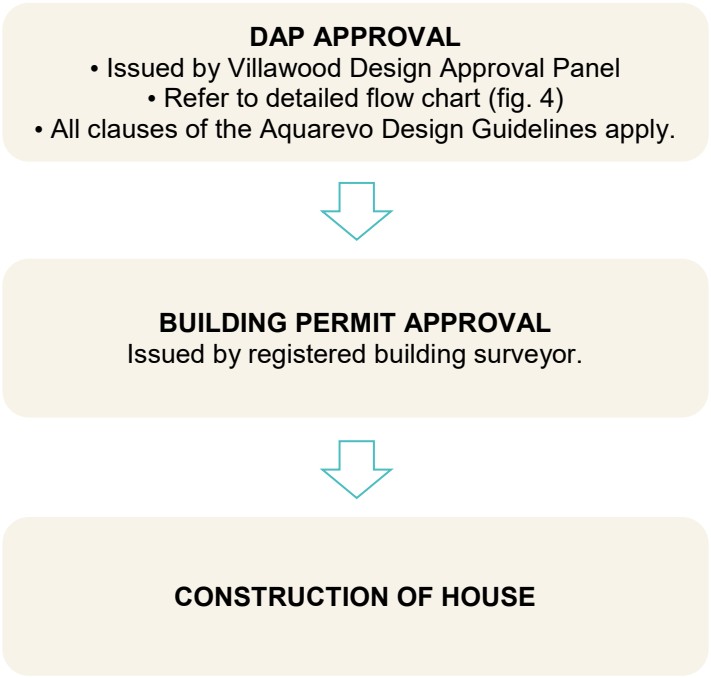
All documents are to be lodged via the Villawood Properties Builders Portal, accessed by visiting www.villawoodproperties.com.au
General enquiries should be directed direct to the DAP via email: dap@kosaarchitects.com.au or phone 9853 3513.

Building envelopes are provided for lots greater than 300 square metres (m²). For lots less than 300 square metres (m²) a specific planning permit must be obtained from the City of Casey prior to the application to the DAP.

2.2 LOTS 300M2 AND GREATER

If your lot is 300m² or greater in size, then the following approvals process applies:

Figure 3. Approval process for lots greater than 300m²



2.3 DAP PROCESS

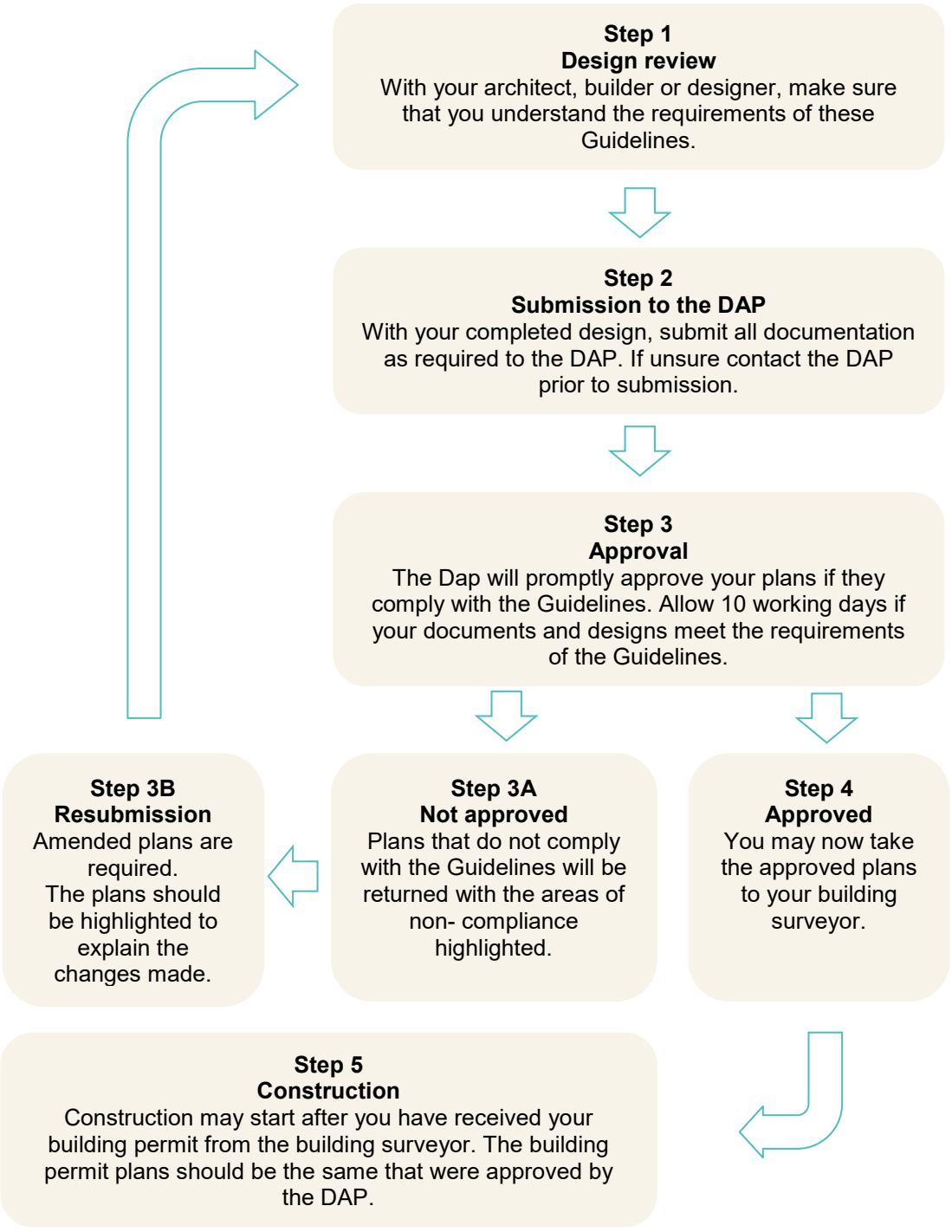


Figure 4. DAP approval process

2.4 PLAN SUBMISSION

After reviewing and understanding these Guidelines, including discussing the Guidelines with your architect, builder and/or building designer, you will need to submit the following to the DAP.

Provide PDF copies in A4 or A3 format to the DAP for approval as follows:

- Site plan (1:200 scale) showing:
  - etbacks from all boundaries
  - Building envelope
  - Existing contours
  - Proposed finished floor levels and site levels
  - External features including driveways, paths, fencing and outbuildings
  - Landscaping.
- House floor plans (1:100 scale)
- Elevations from four sides (1:100 scale)
- All water and energy initiatives clearly labelled (refer to Table 1 and Section 1.3 Summary of Water and Energy Initiatives).
- Schedule of external materials and colours. Colour swatches must be provided.
- Completed Check List (refer Section 8 of Guidelines)
- A Statement outlining how the requirements of 5.10 – Emissions and 5.11 Sustainable Houses are being achieved
- Detail on Solar system including size, invertor brand and panel supplier (Tier 1 required)
- Detail on roof type and roof catchment area
- Detail on Type, Size (cross sectional area in mm) and manufacturers of gutters
- Nominate preferred colour of rainwater tank
- Details on the location of gutter stop weirs
- **Note: do not include internal fit-out details such as kitchens, electrical plans etc.**

Submit all information via the Builders Portal on the Villawood Properties website:
www.villawoodproperties.com.au

All enquiries should be directed to
AQUAREVO DESIGN ASSESSMENT PANEL
c/- dap@kosaarchitects.com.au
or telephone 03 9853 3513

2.5 RE-SUBMISSION

Plans that do not comply with the Guidelines will be returned with the areas of non-compliance highlighted. Amended plans need to be resubmitted for approval.

Any alterations made to the resubmission other than the initial non-compliance should also be highlighted on the plans or an accompanying letter.

2.6 APPROVAL

The DAP will promptly approve plans that comply with the requirements of these Guidelines. Allow approximately 10 working days for approval.

2.7 BUILDING PERMIT

After approval from the DAP, you must then obtain a Building Permit from the Council or a private building surveyor.

Note: Design approval from the DAP does not exempt the plans from any building or statutory regulations other than the regulations that are superseded by the approved building envelopes and approved profile diagrams.

Approval must be obtained from the relevant authorities for building permits, build over easements and connections etc.

Report and consents cannot be requested for regulations that are covered under the approved building envelopes.

Approval by the DAP does not infer compliance under the Building Code of Australia, Rescode and other applicable planning or building regulations.

2.8 CONSTRUCTION

Once a building permit has been obtained, construction of your house may begin.

3. WATER AND ENERGY REQUIREMENTS

All homes in the Aquarevo estate will be afforded with sustainability initiatives that will be the first of their type within a new urban residential development. Integrated water, sewer and energy systems are expected to afford savings in water usage, energy consumption and waste.

These Design Guidelines govern the establishment and installation of these initiatives. The ongoing responsibility for initiatives relating to water and sewerage will be stipulated within the South East Water 'Conditions of Connection' in accordance with the Water Act 1989.

Use and operation of the solar panels will be governed by your agreement with the supplier selected by you or your builder. For use of the mobile device app (refer to Section 3.6 Aquarevo Mobile Device App) you must agree to the terms and conditions when you download the app.

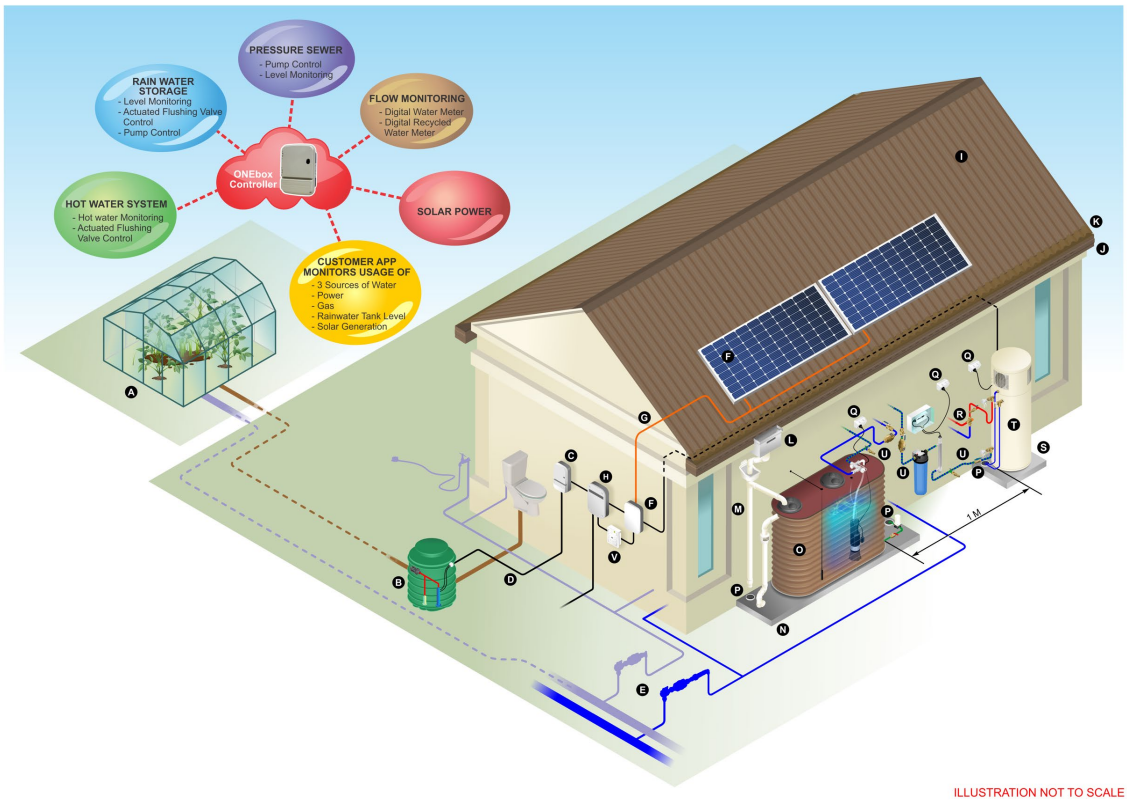


Figure 5. Water and energy initiatives

Refer to Section 1.3 for individual components.

Homes at Aquarevo must achieve a minimum 6 Star Energy Rating in accordance with the Victoria Home Energy Rating System if legislated by the building regulations. An energy rating certificate will not be required prior to DAP approval. However, a certificate will be required prior to obtaining a building permit.

3.1 WATER SUPPLY

Aquarevo homes will be supplied with three types of water. Each has been specifically chosen for its intended use, to reduce reliance on drinking water to supply the home:

1. **Drinking water** as that supplied throughout metropolitan Melbourne is recommended for all drinking and food preparation. Hot and cold drinking water will be supplied to the sinks (kitchen and bars), basins and dishwasher. Cold drinking water will be supplied to the fridges, laundry trough, clothes washing machine and to the front yard tap. Cold drinking water supply to the back-yard taps is optional. A second hot water unit (separate to the one installed by South East Water) is required to isolate the hot water supplied to the drinking and food preparation areas of the home. This will be installed by your builder and it will be the home owner's responsibility for the unit's ongoing maintenance (or replacement if/when necessary).
2. **Class A recycled water**. Waste from all Aquarevo homes will be sent to an on-site Water Recycling Plant (once constructed) and returned as Class A recycled water for use in the garden, toilet and as cold water in the washing machine. Class A recycled water is wastewater treated to a Class A standard; in keeping with the guidelines set by the Department of Health and Human Services and the Environment Protection Authority. Recycled water taps will be coloured purple as is a standard across Australia. Aquarevo homes will have two water meters at the front boundary of the property: one for drinking water and one for Class A recycled water. Class A recycled water will be supplied from a different source until the on-site Water Recycling Plant is operational.
3. **Rainwate**r will be captured from the roof before being screened, filtered and treated using a high-tech rain to hot water system, supplied and installed by South East Water. This treated rainwater will be used for non-drinking purposes and will supply hot water to taps in the bath, shower, laundry trough and washing machine. Identification labels clearly identifying the source as rainwater are to be placed on each of these tap outlets.

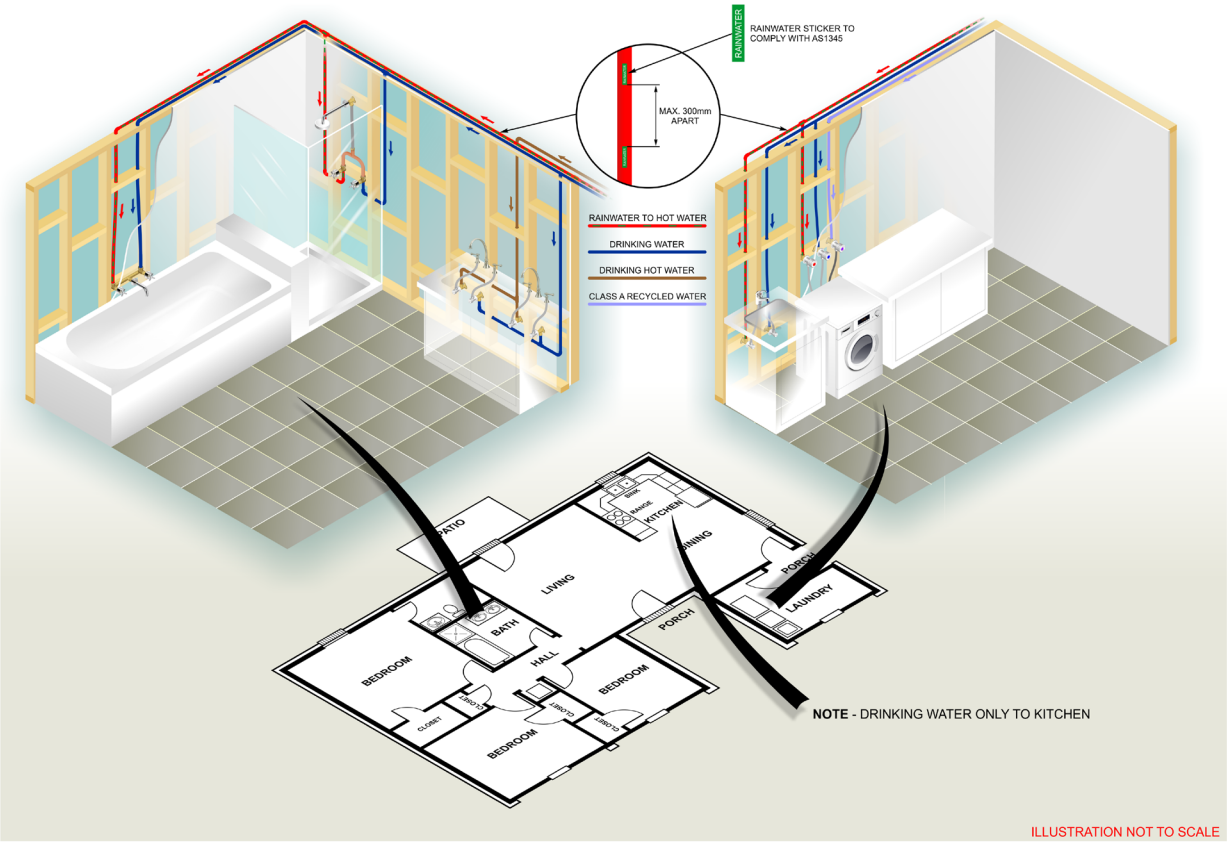


Figure 6. Sources of water.

Rainwater tanks, of a minimum size of 2400 litres, will be supplied, installed (above ground) and maintained by SEW. A gutter guard, gutter stops, leaf diverter and first flush system will be installed. These items will be supplied by SEW, and with the exception of the gutter guard and gutter stops, installed by SEW.

The rainwater will be treated via a water filter and ultraviolet water treatment device prior to entering the hot water system. The rainwater will then be heated to above 60 degrees Celsius and delivered to all hot water taps in your house, excepting the kitchen and vanities.

When rainwater is not available, a backup drinking water supply will automatically activate to ensure an uninterrupted supply of water to your hot water system.

3.2 RAIN WATER REQUIREMENTS

Rainwater tank

- To be shown on Site Plans inside property boundary
- Concrete slab to be provided by the builder (shown on plans)
- To comply with all relevant SEW plans (Refer Figure 7 and Appendices A and B)
- Electrical connection points provided for rainwater tank and treatment system
- Stormwater connections provided for rainwater tank.
- Colour to be nominated by the purchaser (refer to colour chart at Appendix F)

Hot Water System (non-drinking for bathing – showers & baths, laundry trough and washing machine)

- To be shown on Site Plans inside property boundary
- Concrete base to be provided by the builder (shown on plans where applicable)
- To comply with all relevant, SEW plans (see previous slides)
- Electrical connection points for rainwater to hot water installation (Refer Figure 7 and Appendices A and B)
- Stormwater connection for hot water Pressure Temperature Relief (PTR) valve drain and condensate drain.
- Positioning of tempering valve. Plumber to ensure compliance with AS/NZS3500
- Minimise lateral hot water lines between hot water tank and hot water fixtures.
- Solid jacketed red pipes, with green rainwater stickers shown every 300mm.

Roof Design

- The extent of roof catchment area is to be maximised for rainwater harvesting, where SEW are targeting a minimum of 100m2 of roof area (noting the final roof catchment area will be subject to DAP approval).
- Downpipe locations to allow connection to the rainwater tank inlet screen, with the rain head positioned immediately to the side of the rainwater tank and at the opposite end to the filtration/treatment system.
- No uncoated lead flashing to roof
- Avoid sanitary drainage vents and other roof penetrations in the roof catchment area of the rainwater tank
- SEW water supplied gutter guards and stops which will be installed by the builder
- Gutter stops to be supplied and installed by the builder based on the gutter type selected.

Siting of water meters

- To be clear of driveways and paving

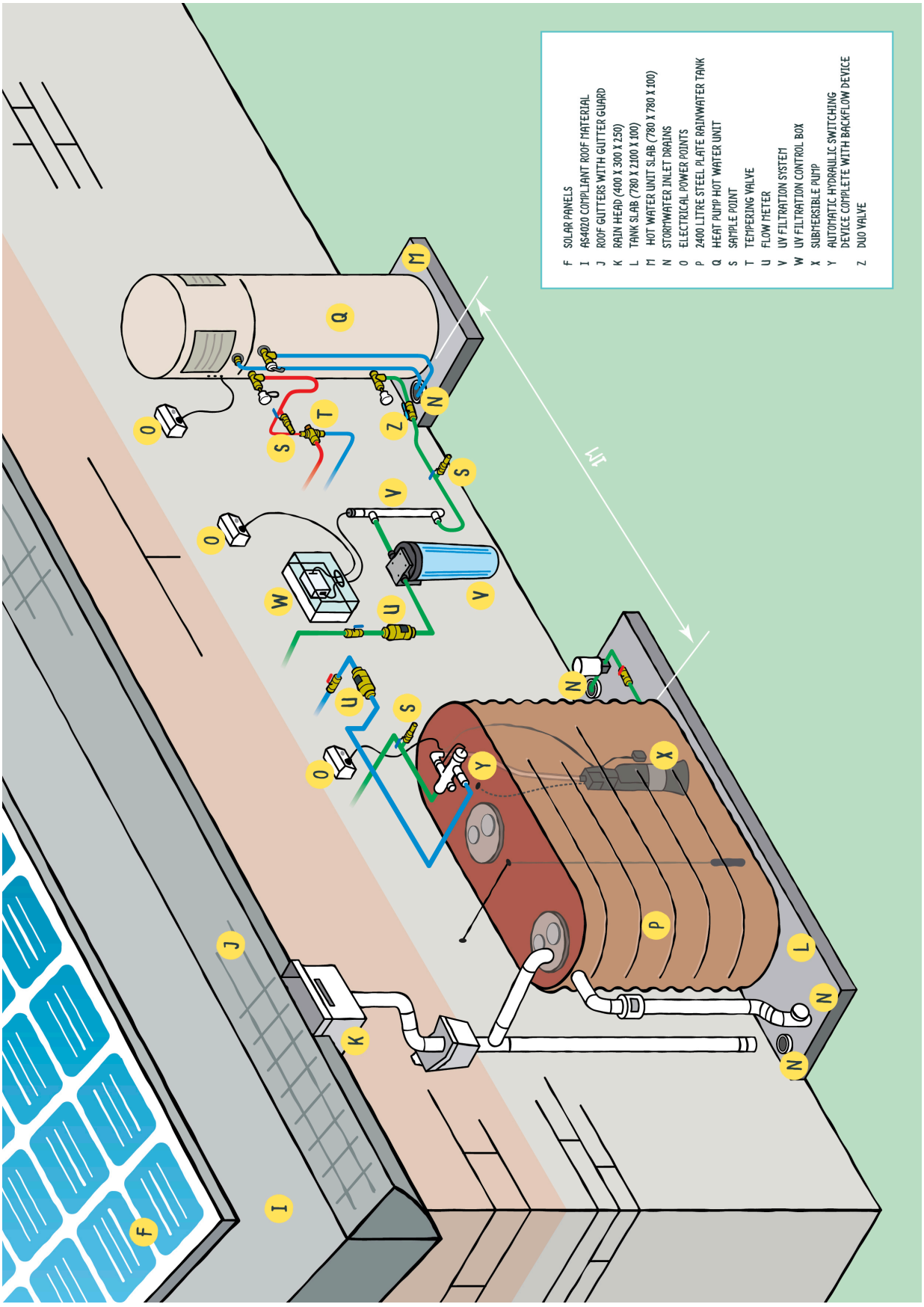


Figure 7. Rainwater to hot water

Please refer to Appendices A and B for a typical arrangement for the SEW rainwater to hot water system.

3.3 HOT WATER AND RAINWATER TANK INSTALLATION

South East Water will own, operate and monitor all components of the following water initiatives.

South East Water will maintain all the water initiatives for a period of 10 years and review the ownership after this time. Access rights for South East Water's maintenance work is outlined in the Conditions of Connection.

3.4 ONE BOX®

Developed by SEW, OneBox® is a small device that allows network operators to manage and optimise water and wastewater systems remotely – and to respond to problems more quickly (often before you know they exist). The OneBox® system will be supplied and installed by SEW.

In Aquarevo, OneBox® will control most of the water technology in your home – including the pressure sewer and Tank Talk.

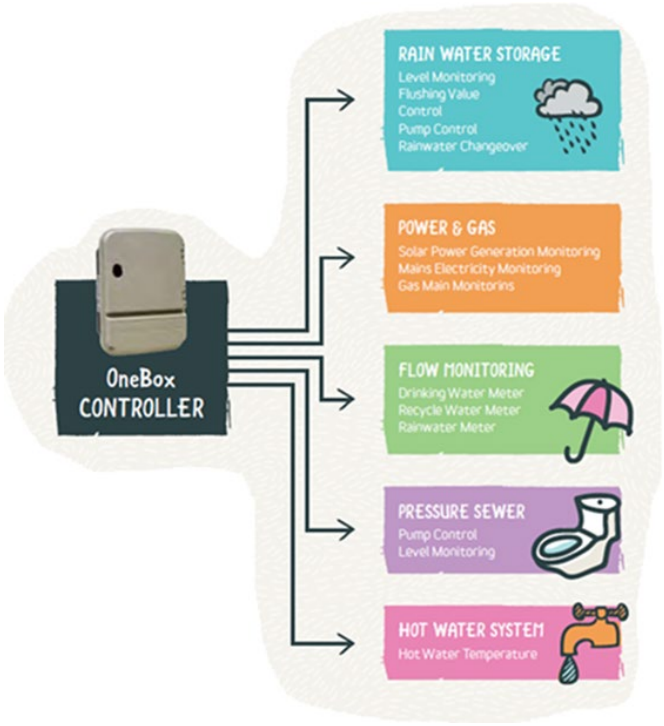


Figure 8: OneBox® Controller

OneBox® Requirements

- Position of OneBox® to be shown on Site Plan.
- When standing in front of OneBox® the Pressure Sewer Tank/pod must be visible (no more than 12.5m from the tank). Please refer to Figure 9 and appendices A,B and E.
- To be located at least 500mm away from any gas meters
- To be at least 1.2 metres above the floor level
- Preferred location for the OneBox® is adjacent to the electrical meter box).
- Conduits from OneBox® to water meters, rainwater tank and hot water tank to be provided and included as part of the house design
- 20 Amp Circuit Breaker and cable (as per Section 1.3)

Tank Talk

Tank Talk was also developed in-house at South East Water. It collects weather forecast data from the Bureau of Meteorology and 'talks' with OneBox® to have a controlled release of tank water into the stormwater system servicing the wetlands of the estate when heavy rain is due. This means there's always room in the tank to capture new stormwater - reducing overflows onto your property or into the street and reducing the risk of flooding to local waterways.

3.5 PRESSURE SEWER

All Aquarevo homes will be connected to a pressure sewerage system, which consists of a tank unit (pod) and pump located (refer to item B – Table 1) underground on each property. The sewage is pumped from the unit rather than through a gravity system. Refer to Fig. 9 on the following page for a visual representation of the system.

By regulating sewer flows and removing peak volumes from the network, we can use smaller pipes and minimise impact on the environment during installation, maintenance and during storm events.

Aquarevo's pressure sewer will be linked to SEW's sewer monitoring system, making service reminders and maintenance requirements easy to undertake.

The pressure sewer system including sewer pods will be supplied, installed and maintained by SEW. The sanitary drain connection works from fixtures within the home to the supplied connection point on the pressure sewer tank (pod) are to be carried out by the builder/plumber.

Pressure Sewer Requirements

- The pre-determined location of the Pressure Sewer Tank to be shown on Site Plans inside property boundary (see typical site plan below and Appendix E) Also refer to the relevant stage engineering plans for the final pod location.
- Depth and connection of pressure sewer to comply with all relevant SEW plans
- An 800mm maximum to invert of the sanitary drain connection to the pod will be provided by South East Water (refer to Appendix E)
- Top of tank (pod) is to be 50mm above ground level or if not determined at lockup stage 50mm above final footpath level
- Landscaping will need to allow for the fixed finish level of the pressure sewer tank (pod).

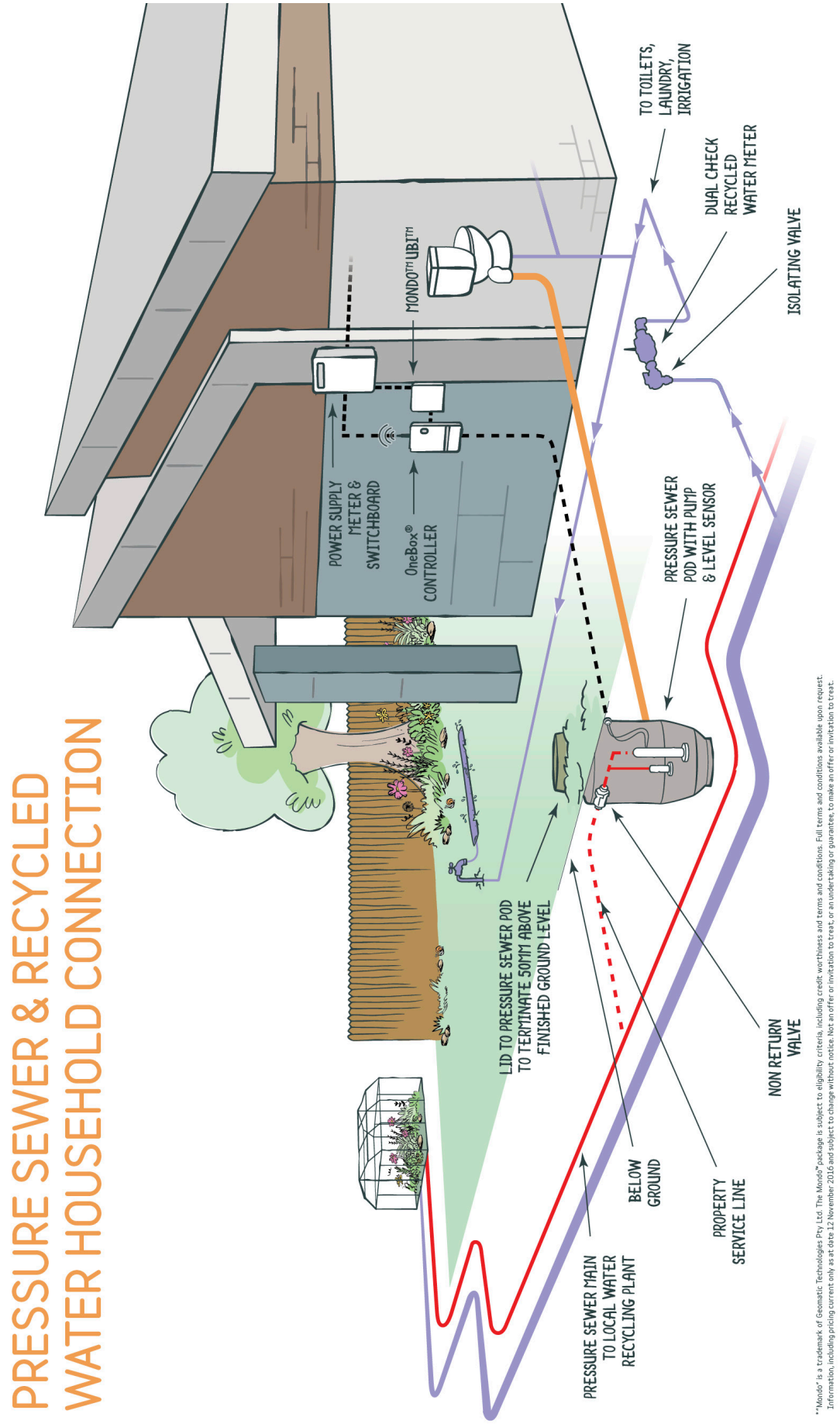


Figure 9. Pressure Sewer Layout

3.6 ACCESS TO PERSONAL USAGE INFORMATION

All Aquarevo homes will contain leading edge technology that will enable customers to access near real-time usage information to help them manage and reduce water and energy use. All residents within the Estate will have access to an online portal which will provide timely data on water, gas and energy use. This will help you to manage and reduce your water and energy bills.

3.7 SOLAR

A minimum 3kW solar system must be included on each home.
This is to be provided by the owner by either:

1. Via your chosen Builder as an inclusion (Villawood Preferred);
2. Owner nominated supplier.

The choice of a solar power provider is at the discretion of the purchaser/builder. Please speak to your builder or an Oliver Hume sales representative about the options available to you.

Solar Power Requirements

Mondo™Ubi™ Device

Supplied and installed by South East Water, this device is similar in size to OneBox® and will track and monitor your household's solar power generation as well as household energy consumption (enabling you to modify usage behavior to save money and resources).

The Mondo™Ubi™ Device is to be installed as close as practicable to the solar inverter, noting the device must be installed within 1 meter of the meter box as per Table 1 of the design guidelines.

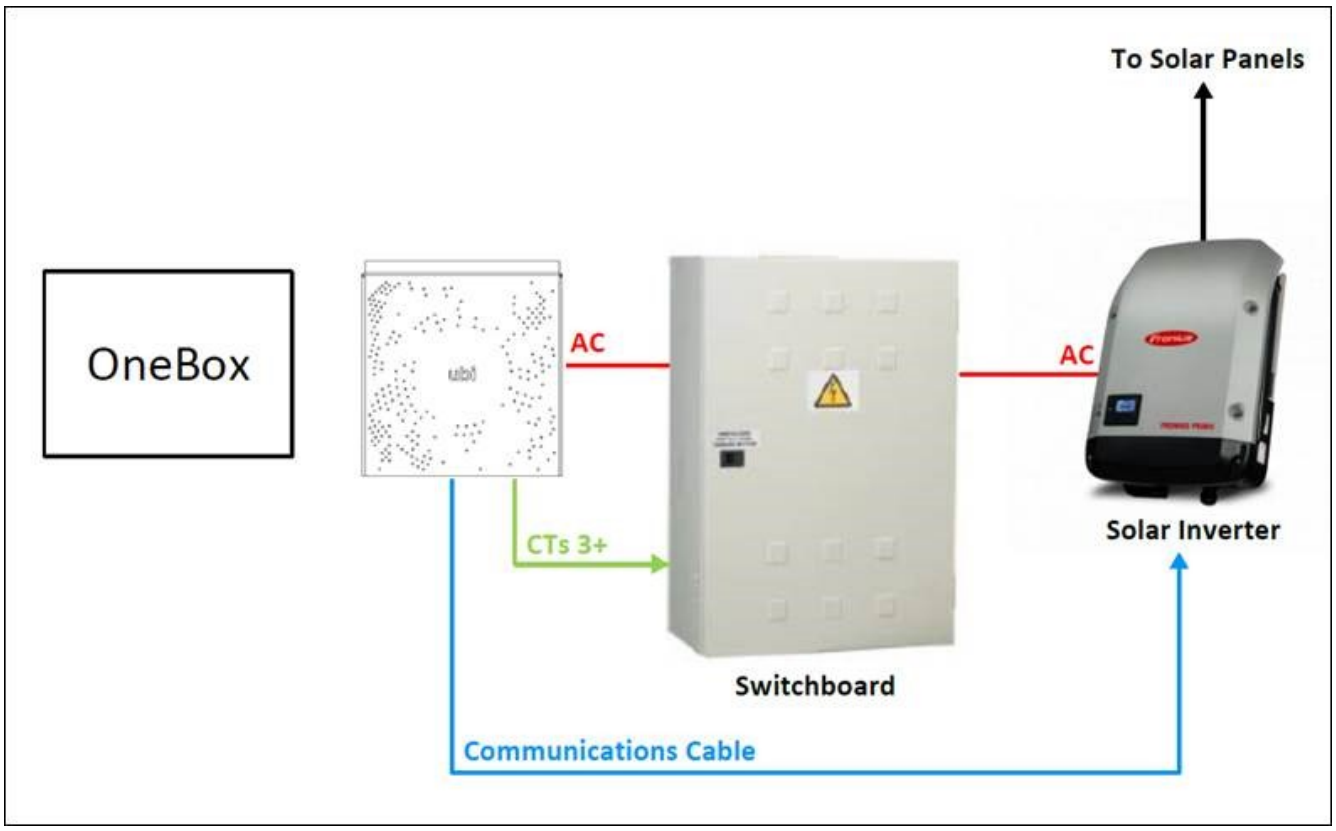


Figure 10: Mondo™Ubi™ connection diagram.

Solar System

- Minimum 3kW solar panel system to be installed on each home.
- Complete system including: solar panels, mounting frames, inverter, AC isolators and DC isolators as required to comply with applicable Australian Standards (AS4777, AS5033). The solar system shall be provided by the owner and connected to the electrical switchboard.
- The Solar Panels manufacturer is required to be a 'Tier 1' supplier as defined by Bloomberg New Energy Finance
- The inverters must be of high quality and preferred to be a European or Australian made inverter
- To ensure full integration with Ubi solar invertors used should be one of the following suppliers/bands;
    - Fronius
    - Selectronic
    - SolarEdge
    - Sonnen
    - SMA

Battery storage

- At a minimum provision must be made in the home (as close as practicable to the solar inverter to avoid voltage drop) for future battery storage options. This includes a location for battery storage, relevant conduits for battery storage and connection to the OneBox® system in the future.
- If your solar system is to include a battery please note the following;
    - It is preferred that the battery be made from Lithium Ferrous Phosphate (LFP). This is because there are no heavy metals so the battery is recyclable and has lower impact on the environment and it is considered the safest under State Government guidelines;
    - All Australia laws and certifications need to be met including the new adoption of IEC 62619 from June 2018 which focuses on the safety of battery modules;

Heat Pump Connection to Solar

The heat pump is fed by grid power, as well as the solar system as an energy source.

Electric Car Charging Point

Every home needs to provide appropriate provisions in the garage for the inclusion of a future car charging point. This includes electrical conduits and an identified location for a future car charging point on plans.

Solar panels and roof design

- Ideally, solar panels should be facing as close to true north as possible
- Alternatively, a west installation can see generation occur in the evenings when most residents are at home using electricity.
- The angle that the panels face up to the sky should be between approx. 25 to 30 degrees for optimal system yield.

4. SITING & ORIENTATION

4.1 CONSIDERATIONS

The siting of your home will be integral in developing the neighbourhood theme within the community. Consideration must be given to:

- Ensuring best visual presentation from the street
- Maximising the benefits of solar access
- Promoting energy efficiency
- Minimising overlooking and over shadowing
- Respecting the privacy and amenity of your neighbours.

4.2 LAND USE

One dwelling only is permitted per allotment. Dual occupancy and further subdivision is not permitted. This does not apply to allotments identified by the developer as medium density allotments.

4.3 HOUSE ORIENTATION

Houses must face the main street frontage and present an identifiable entrance to the street. The front door may face some side street frontages; this should be verified with the DAP. Where possible, houses should be sited so that habitable rooms and private open spaces face northwards to receive maximum solar efficiency.

4.4 DWELLING ARTICULATION

To ensure that dwellings constructed within the community are designed to a high quality contemporary standard, they should be designed so that front and secondary street frontage facades are well articulated. Broad flat surfaces extending greater than six metres shall not be permitted.

Articulation can be achieved through a variety of ways and must incorporate at least one of the following features;

- Use of different materials and textures
- Variable wall setbacks to the front and side street boundaries
- Introduction of verandahs, porticos and pergolas
- Feature gable roof
- Continuation of window style.

Acceptable articulation

No articulation

Figure 11. Articulation Examples

4.5 BUILDING ENVELOPES AND SETBACKS

Building envelopes
Building envelopes have been prepared for the lots in each stage at Aquarevo and are contained within the Guidelines. The construction of buildings or associated buildings, including garages, must be contained within the building envelope specified for that allotment in the Guidelines and in accordance with the profile diagrams depicted in the Guidelines.

Setbacks
The following setbacks for houses and garages must be met.

(i) The front street

The front street setback is designated on the specified building envelope for each allotment. All houses must be set back from the main street frontage by the minimum distance indicated.

Garages must be located or set back behind the front façade of the home, where all lots greater than 300 m² must have garages setback a minimum 5.5 metres from the main street frontage, unless otherwise specified.

(ii) Splayed and curved street frontages

Unless noted on the plan, the minimum front setback on a splayed or curved corner between two street frontages is on an arc connecting the front street setback line to the side street setback line commencing at the points that are perpendicular to the points where the street alignment commences to arc.

Front entrances are to be easily accessible from the main street frontage.

(iii) The side boundaries

The side setback is designated on the specified building envelope for each allotment. A building must be set back from a side boundary not less than the distances specified in the building envelope profiles and shown on the building envelopes by a setback identifier code. Garages may be built to the side boundary if provided for on the building envelope and adjacent buildings allow. The measurements are taken from the natural surface levels to the top of the wall.

(iv) The side street boundary

The side street setback is designated on the specified building envelope for each allotment.

(v) The rear boundary

Generally, a rear wall of a building not exceeding 3.6 metres in height must be set back from the rear boundary a minimum of 3 metres, and a rear wall of a building exceeding 3.6 metres in height must be set back from the rear boundary a minimum of 5.5 metres for standard lots. The maximum height of a building facing a rear boundary must not exceed the maximum building height allowed by the side envelope profile as shown in the profile diagrams, or a height limit for a rear setback as dimensioned on the building envelope plan.

(vi) Walls on boundaries

Unless otherwise noted on the building envelopes, walls and associated parts of a building within 1.0 metre of a boundary are restricted to areas within a Building to Boundary Zone (BBZ). The BBZ spans the length of the side boundary between the front and rear setbacks permitted by this building envelope. Total length of walls in the BBZ is limited to 60 per cent of the length of the boundary except for terrace style lots where walls are permitted to the extent of the nominated BBZ.

Within the BBZ, the following applies:

- Only one side may be built to the boundary
- Walls within the Building to Boundary Zone are allowed.
- Carports and verandahs are not permitted to be built to the boundary.
- Maximum height of a wall in the BBZ is restricted to 3.6 metres.
- Walls less than 1.0 metres from the boundary must be within 200 mm of the boundary.

(vii) Encroachments

Side, side street and rear: The following may encroach into the specified setback distances by not more than 600 mm (for the purposes of these guidelines, gutters are not a measured item):

- Porches, eaves, verandahs
- Masonry chimneys
- Screens, but only to the extent needed to protect a neighbouring property from a direct view
  - Water tanks
  - Heating and cooling equipment and other services.

Note; consideration must be given to the various ancillary equipment and the servicing of such equipment.

The following may encroach into the specified setback distances:

- Landings with an area of not more than two square metres and less than 0.8 metres high
- Unroofed stairways, decks and ramps
- Pergolas
- Shade sails
- Eaves, fascia, gutters.

Front: The following may encroach into the specified front street setback distances by no more than 1500 mm (for the purposes of these guidelines, gutters are not a measured item):

- Porches and verandahs to a maximum height of four metres.
- Decks and uncovered landings of not more than two square metres and less than 0.8 metres high from natural ground
- Eaves.

(viii) Edge boundary

Exemptions relating to side setbacks and relating to siting matters do not apply to an edge boundary.

4.6 BUILDING HEIGHT

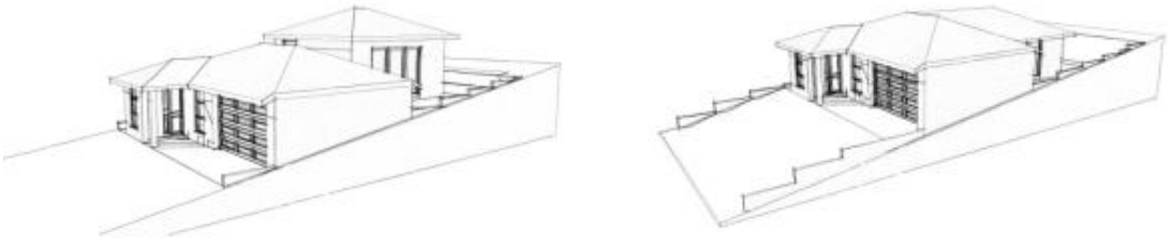
The maximum building height is 9 metres above the natural surface level of the ground directly below it. A maximum rise of two storeys is permitted.

For the purpose of the Guidelines, a maximum wall height of 7.2 metres is permitted above natural ground level. Natural ground/surface level is defined as the ground level after engineering works associated with the subdivision have been completed. Sloping sites which may allow additional built area under the ground floor level will be considered and may be approved depending upon overall design and setback requirements. Large bulk excavations or high retaining walls are not permitted. For the purpose of these Guidelines retaining walls greater than one metre are considered excessive.

Regulation 75 is superseded by this guideline.

4.7 SLOPE CONSIDERATIONS

Houses and garages should be sited and designed to take advantage of the natural slope conditions at Aquarevo. Split level designs, for example, can be designed to follow the fall of the land and avoid unsightly and expensive earthworks that scar the natural landscape.



Correct level of excavation *Incorrect level of excavation*

Figure 12. Example on Levels

Unsightly cut or fill should be avoided and limited to 1.0m in depth. Landscaped terraces are preferred as per below with engineer-designed retaining walls.

4.8 SITE COVERAGE

Unless otherwise specified in the notations to the building envelopes as they apply to particular allotments, buildings must not occupy more than 60 per cent of the lot.

In calculating site coverage, eaves, fascia and gutters not exceeding 600 mm in total width, and unroofed swimming pools, terraces, patios, decks and pergolas should be disregarded. Roofed areas of terraces, patios, decks and pergolas are to be included in overall calculations.

Please be aware of the building regulations with regards to timber framed structures such as pergolas, verandahs and decks. Refer to VBA's 'Minimum setback for decks' information sheet.

Those lots noted accordingly in the building envelopes may have maximum permitted site coverage of 70 per cent but must have a private open space area that measures 25m² with a minimum dimension of 3 metres in width.

Regulation 76 is superseded by this guideline.

5. BUILT FORM

5.1 ARCHITECTURAL STYLE

At Aquarevo, high standards of house design will be required and a variety of styles are encouraged. Designs should be responsive to the individual attributes of the lot, having regard to any slope or vegetation. Designs that break the front of the dwelling into distinct visual elements will be supported.

The inclusion of projections integral to the design and style of the dwellings such as verandahs are encouraged. Further enhancement can be achieved through the use of detail and shade in the form of pergolas and extended eaves.

Houses with identical facades may not be constructed in close proximity and identical houses must be separated by a minimum of five houses in any direction. This will only be permitted where lots are less than 300 sq. m and are located next to each other, but do not share a common street frontage. The appearance of dwellings should provide a degree of richness and variety ensuring the creation of pleasant, interesting streetscapes.

Houses which have long uninterrupted expanses of wall should be avoided. Features, which may detract from the appearance of a house from the street, including small windows, obscure glass, window security shields, canvas and metal awnings, will be discouraged.

5.2 MATERIALS AND COLOURS

The materials and colours of the walls and roofs of houses will have a major impact on the visual quality of Aquarevo. The use of a combination of finishes is encouraged for the purpose of achieving a degree of individuality and interest.

Thoughtful selection of materials and colours will achieve a degree of visual harmony between houses and will avoid colours that are out of character with neighbouring houses. For these reasons, purchasers are requested to submit roof and wall materials and colours for approval. Colours which reflect the natural tones of the environment at Aquarevo are recommended.

External walls

- The external walls (excluding windows) are to be constructed of brick, brick veneer, texture coated material, weatherboard or other material as approved by the DAP. Colours of trims should be selected to complement the main body of the house and the natural environment.
- Dwellings must have at least 25 per cent render to the front facade or other texture coated material as approved by the DAP.

Roofs

- The roof is to be constructed of steel or masonry or as approved by the DAP. Roof colours which reflect the natural tones of the environment at Aquarevo are recommended and the use of Colorbond is encouraged. All materials must conform to Australia Standards in accordance with the drinking water requirements.
- Articulated roof shapes are preferred with hips and gable roof forms, coastal skillion roof styles and higher degrees of pitch encouraged, although each design will be considered on its merits by the DAP. In each case the roof design should maximise the catchment of rainwater supplying the rainwater tank (targeting 100 square metres as a the minimum where the final catchment area will be subject to DAP approval).
- The roof catchment area (targeted to be a minimum of 100m2 - refer section 3.2 Rainwater Requirements) is maintained free of items such as evaporative coolers and other roof penetrations reducing the possibility of birds landing on the roof which may impact the purity of the water in the rainwater catchment area.

- Black roofs are not encouraged – muted earthy and natural tones are acceptable.
- Roofing and gutter within the rainwater tank catchment area to be thoroughly cleaned prior to installation of the gutter guard.

5.3 DWELLING SIZE

The minimum dwelling size is:

- 160 square metres in the case of a lot having an area of 500 square metres or greater; or
- 130 square metres in the case of a lot having an area of 400 square metres or greater but less than 500 square metres; or
- 100 square metres in the case of a lot having an area of 300 square metres or greater but less than 400 square metres; or
- 75 square metres in the case of a lot having an area of less than 300 square metres.

5.4 TERRACE AND DUPLEX STYLE DWELLINGS

Terrace style and duplex dwellings and dwellings on lots less than 10 metres wide must have a greater degree of articulation to the front facades. Stepping of the materials and the use of alternate materials must be incorporated to accentuate the articulation. Consideration of garage location and treatment must be considered so as not to dominate the streetscape.

5.5 TWO STOREY DWELLINGS

All two storey dwellings must be articulated to the front façade as a minimum, alternate materials are encouraged as a method of providing the visual break from a monotone and bleak façade. Treatments such as pergolas, verandahs etc. are recommended to break the line of sight. This recommendation also reflects to double storeys dwellings to corner allotments.

It is important to ensure that two-storey houses are designed and sited correctly to minimise overlooking and overshadowing. It is recommended that initial concepts for two-storey houses be discussed with the DAP.

The articulation of the front of the upper level of two-storey houses is encouraged to avoid dominating the streetscape.

5.6 CORNER ALLOTMENTS

The home design must address both the primary and secondary street frontages and be of a consistent architectural design.

Design elements (such as verandahs, detailing, feature windows and materials) used on the primary frontage must continue on that part of the secondary frontage that is visible from the public realm.

5.7 GARAGES

The garage and family car(s) have a significant impact on the streetscape. The design and location of garages should endeavour to make them an integral and unobtrusive part of the house. All homes must allow for an enclosed garage for car accommodation. All lots greater than 300 m² must have garages setback a minimum 5.5 metres from the main street frontage, unless otherwise specified.

Double garages must be provided on lots greater than 12.5 metres in width. Garages must be constructed within the Building Envelope. The garage setback also applies for entry to the garage from the side street boundary, unless otherwise noted.

Crossover locations on the block have been carefully considered to ensure that the position of the house may receive maximum north sun and those appliances such as the water tanks and HWS are located behind the garage generally and out of view. This will also allow the accurate placement of the sewer tank location. Therefore, relocating crossovers will not generally be considered.

It is preferable for garages to be constructed under the main roof of the house. If garages are free standing and/or visible from the street, they should match the roof form and be constructed of the same materials as the house. The garage may be constructed to the side boundary, depending on the location of adjacent buildings and garages relative to the side boundaries and whether permitted by the building envelope. Deep excavations on the boundary will not be permitted as this will cause detriment to adjoining properties.

Secondary garages are discouraged. The design for an additional garage would need to be discussed with the DAP and it must be disguised and out of view from the main street frontage. Only one crossover is permitted and only one double garage door is permitted to be visible from the main frontage of the house.

When designing garages, consideration must be given to the screening of boats, caravans and trailers and for 'drive-through' access to the rear yard. The garage door is a major visual element of the streetscape and doors facing the street must be panelled and of a colour which complements the house. The inclusion of windows, recesses or projections in the garage door should be considered so as to present an interesting and integrated façade.

Every home needs to provide appropriate connections in the garage for future electric car charging points. This includes electrical conduits and an identified location for a future car charging point on plans.

5.8 OVERSHADOWING

This item is covered within the building envelope plan and profile diagrams.
Building Regulations 416, 417 and 418 are superseded by this Guideline.

5.9 PRIVACY AND OVERLOOKING

This item is covered within the building envelope plan and profile diagrams.
Building Regulation 419 is superseded by this Guideline.

5.10 EMISSIONS

To facilitate the provision of a healthy environment in all dwellings within Aquarevo every home is required to use low emission paints, sealants and adhesives in the construction of the dwelling where the builder must ensure the adoption of at least 2 of the following 5 options;

1. Use low emission paints on ≥95% of internal and external painted surfaces.
2. Use low emission sealants on ≥95% of internal and external surfaces.
3. Use low emission adhesives on ≥95% of internal and external surfaces.
4. Use low emission floor coverings on ≥95% indoor-covered floors.
5. All engineered wood products (including exposed and concealed applications) are E0 - rated.

To ensure compliance the builder is to provide a Statement outlining how this requirement will be met as part of the DAP submission. The statement is to include details including product name, number and data sheet should also be provided.

5.11 SUSTAINABLE HOUSES

Aquarevo aspires to be a benchmark sustainable community and as such we strongly encourage the use of high quality, durable and sustainable materials in all dwellings within the community. Elements for consideration include:

- **Structure:**
  Use of structural timber which is AFS (Australian Forestry Standard) or FSC (Forest Stewardship Council) accredited.

- **Envelope/Linings:**
  Use plasterboard that consists of recycled paper.

- **Services:**
  PVC content sourced from an ISO 14001 certified supplier.

6. EXTERNAL CONSIDERATIONS

6.1 ACCESS AND DRIVEWAYS

Driveways are a major visual element at Aquarevo and should be constructed using materials that blend with or complement the dwelling textures and colours. Only one driveway will be permitted for each lot, unless there are special circumstances, if so these need to be discussed and confirmed with the DAP.

Driveways must not be wider than 5 metres at the street boundary of a lot and planting between the driveway and property boundary is encouraged.

Driveways must be constructed of brick and/or concrete pavers, coloured concrete, saw-cut coloured concrete, or concrete with exposed aggregate. Plain concrete is not permitted.

Figure 13: Examples of approved driveway finished.

All driveways must be completed within three months of the Occupancy Permit being issued.

Driveways and paths must not cover the services provided by and for SEW such as the sewer pods and meters.

6.2 FENCES

The objective of the DAP is to provide a degree of uniformity throughout the estate and thereby avoid an untidy mix of various fence standards, colours and types. To enhance the park-like character of the estate, no front fencing will be permitted.

Fences may be stained with a clear finish but must not be painted with coloured stains or paint.

On side boundaries, no fencing is permitted forward of the building line. (see figure 13).

All side and rear fences are to be constructed of timber palings with exposed posts and capped across the top to a maximum height of 1.8 metres (excluding a screen required for overlooking purposes).

All fencing must be constructed in accordance with the Restrictive Covenant as detailed on the relevant Plan of Subdivision and as approved in writing by the DAP. For the purposes of these Guidelines, the prescribed fence height of 1.8 metres to the side street, side and rear boundaries will be exempt from the provisions of the Building Regulations.

For corner lots, a fence to the street side boundary must not commence closer than 3.0 metres back from the main building line, this is to provide an opportunity to present the house to the secondary street frontage.

Fences permitted by the Guidelines are not deemed to overshadow the recreational private open space on the allotment.

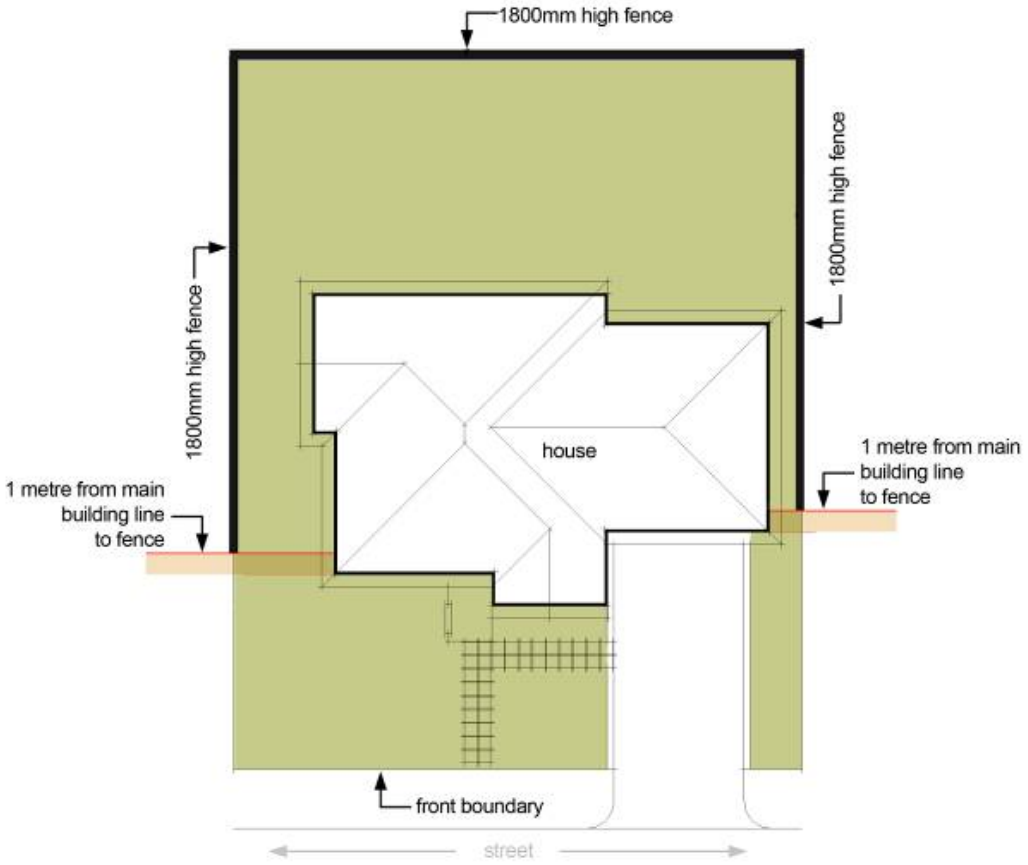


Figure 14. Depiction of typical boundary fencing location

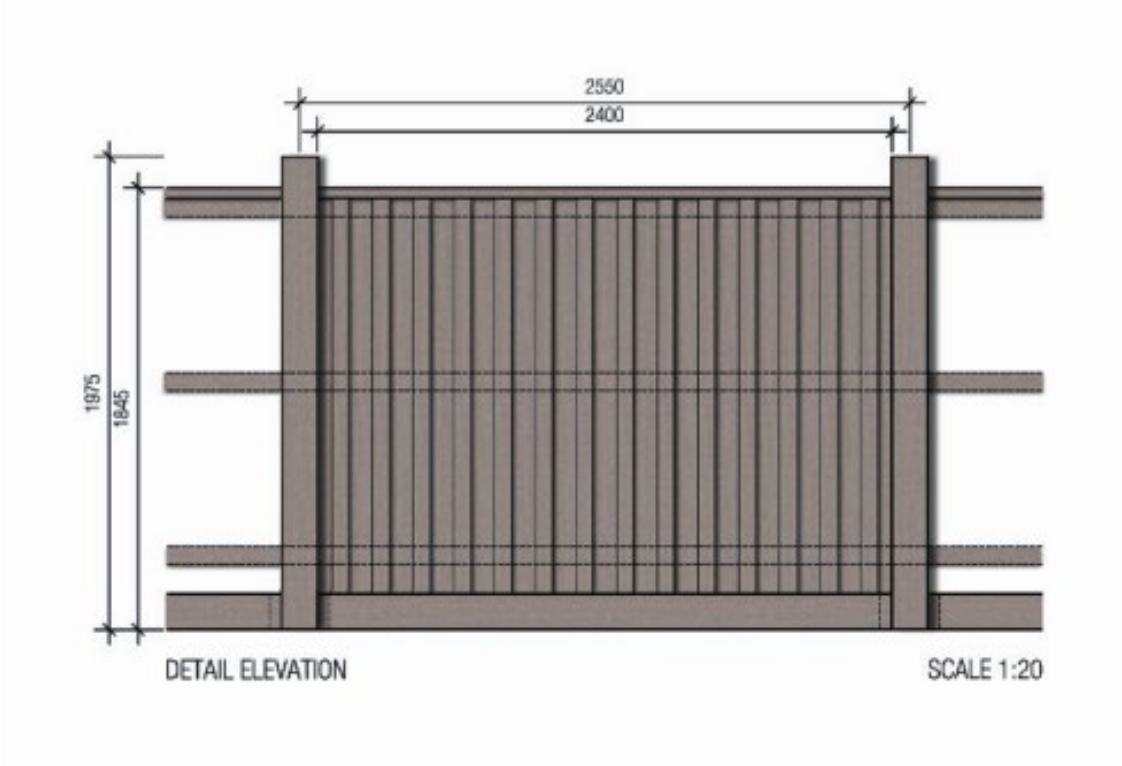


Figure 15. Elevations of typical paling fence

Figure 16. Side boundary fence elevation

6.3 LETTERBOXES

Letterboxes should be designed to match the house using similar materials and colours and must be erected prior to occupancy permit.

The size and position of the letterbox must comply with Australia Post requirements. The street number must be clearly identifiable, suitably sized and located and must not interfere with the overall streetscape.

Acceptable *Not acceptable*

Figure 17. Letterbox Examples

6.4 GENERAL

External fixtures must achieve the following objectives and the location must be noted on plans to be submitted to the DAP.

The following must not be visible from the street*:*

- clotheslines
- garden sheds
- external hot water services (As per Section 1.3)
- Ducted heating units.

Air-conditioning units
Evaporative air-conditioners must be positioned so that they are not visible from the main frontage of the dwelling and are not within the roof catchment area of the rain water tank. They must be painted to match the colour of the roof, be low profile units and installed as low as possible below the roof ridgeline towards the rear of the house. Wall mounted air-conditioners must be located below the eaves line, screened from public view and suitably baffled to reduce noise.

Low profile and positioned at rear Acceptable

Standard unit in clear view of street Not acceptable

Figure 18. Air-conditioning Examples

Television antennae are not permitted as television services are available through the Opticomm Fibre Network.

Satellite dishes will only be approved if located below the roofline of the house and must be screened from public view.

Roof penetration such as sanitary drainage vents and flue outlets are to be minimised.

Rainwater tank for the hot water system (non-drinking purposes) will be supplied, installed and maintained by South East Water.

No external ***plumbing*** to a dwelling shall be visible from a street or dwelling. All plumbing on double-storey houses, except downpipes, must be internal so as not to be visible from the street or neighbouring properties.
Conduits and/or cables will be installed enabling communication between the water saving initiatives.

External lighting including spotlights, flood lights and any lights illuminating any outdoor area are to be approved by the DAP and the use of LED or solar lighting is encouraged.

Rubbish bins and recycling bins should be stored out of view from the street.

Commercial vehicles with a carrying capacity of one tonne or more or any boat, caravan or trailer shall not be permitted to be parked on a lot so that it is visible from any street.

Advertising signage
Signage is not permitted on residential lots with the following exceptions:

- Only one advertising sign will be permitted to be erected on a lot that is being advertised for resale AND only after the developer has sold ALL lots in the relevant stage.
- Display home signage will be permitted but only with the written approval of the DAP and the City of Casey.

Builders or tradespersons identification required during construction of the dwelling to a maximum size of 600 mm x 600 mm. Such signs must be removed within 10 days of the issue of the Occupancy Permit.

Sheds
Sheds should be restricted in size and must be in harmony with the other buildings. Sheds are to have a maximum wall height of 2.4 metres, maximum ridge height of three metres and a maximum floor area of 9 square metres. It is the responsibility of the purchaser to ensure that the requirements relating to location, size and height for all outbuildings adhere to governing authority requirements.

All sheds are to be erected with a muted/earthy tone COLORBOND® material.

Carports
No carports are permitted to the front of the dwelling.

Swimming Pools & Spas
Any properties with a swimming pool will not be permitted to drain their pool directly to the pressure sewer unit, without prior specific approval. The customer will be required to either:

- Install a system to ensure that discharge from the pool does not exceed the capacity of the pressure sewer pump well, e.g. storage; or

- Install a soakage pit in order to drain the pool to stormwater, local regulations permitting.

Customers who install a pool after they have received a pressure sewer connection will not be permitted to drain their pool to their pressure sewer unit, and will be required to comply with local authority requirements. In cases where this is not possible, the customer will be required to install a system to ensure that discharge from the pool does not exceed the capacity of the pressure sewer pump well.

Customers with a spa are to install a flow restrictor to the drain which ensures the discharge rate does not exceed 0.5L/s. This flow restrictor shall be installed by a licensed plumber.

Swimming pools and spas do not require DAP approval.

Window furnishings
Internal window furnishings which can be viewed by the public must be fitted within three months of occupancy. Sheets, blankets or similar materials for which window furnishing is not their primary use will not be permitted.

6.5 LANDSCAPING AND TREE PROTECTION

General guidelines
The garden design will require careful thought to ensure that the appropriate plants are selected for the particular lot conditions.
The objective is to achieve a cohesive blend of indigenous vegetation and other landscape elements, integrating street and parkland landscaping with private gardens so that the streetscape presents as a landscaped garden.

Landscape design and plant selection should minimise the need for garden watering. No tree or shrub with a mature height greater than three metres should be planted closer than two metres to

the house. Purchasers should make their own enquiries with the Council and obtain a list of allowable vegetation.

Front gardens
All landscaped areas to the front of the house must be established within three months of the issuing of the Occupancy Permit to ensure good presentation is achieved for the local community. The front garden should include a variety of plants, lawn, garden beds that incorporate ground covers, small to medium shrubs and at least one advanced feature tree from a 75 litre pot when planted.

Figure 19. Examples of acceptable landscaping treatments

Embankments
Embankments should not exceed a slope of one in five. Retaining walls are preferred to steep embankments and should be kept to a maximum height of 1 metre. A number of small terraces are preferred.

Not acceptable

Acceptable

Figure 20. Examples of acceptable landscaping treatments

6.6 CONSTRUCTION MANAGEMENT

Construction works must comply with all council bylaws and regulations where we draw specific attention to the following;

- The site must be kept clean at all times during construction to minimise impact on neighbours.
- The construction site is to be securely fenced at all times where during the construction period, the builder must install a temporary fence and ensure that rubbish and building waste is contained within the building site.
- All rubbish generated must be disposed of off-site.
- The lot must be maintained prior and during construction, with grass cut, weeds and rubbish removed.

- Damage to nature strips caused during the construction period is solely the responsibility of the landowner and their builder.
- Earthworks are to be managed carefully, and dust is to be controlled.
- Storage of all plant and materials are to be on the subject lot only, and not on adjoining lots or open space.
- Vehicle parking is not permitted on other lots, open space, median strips or other landscaped areas.
- Existing vegetation is to be protected with tree protection barriers.
- Stormwater is to be managed.
- Sediment is to be controlled, and revegetated areas, downstream waterways and wetlands are to be protected.
- Pets are not allowed on site during the construction stage.

6.7 WASTE MANAGEMENT

Waste management initiative's and practices are essential during the construction phase of the dwelling.

Builders are to include recycling practices where possible which include but are not limited to;

- The use of skips rather than cages
- Maintenance of waste records
- Use of contractors who transport waste to a licensed recycling centre
- Select materials and products which minimise and/or recycle packaging
- Maximise the use of standard sizes of materials wherever possible

Disposal of all hazardous substances, pollutants and contaminates are to be in accordance with all state regulatory requirements. Where these materials are treated, or used on site, they must be in, accordance with a sanctioned remediation process

6.8 BROADBAND NETWORK

Aquarevo is an OptiComm Fibre Connected Community. This means that all homes in Aquarevo will have access to the OptiComm high speed broadband network. Some benefits of high speed broadband are:

- Distribution of analogue and digital free to air television
- Ultra-high speed internet - even in high usage times and not affected by distance from an exchange
- International television programs
- Pay TV - choice of providers
- External aerials and satellite dishes are not required.

What you need to do to prepare for high speed broadband:
Step 1. Conduit (pipe) installation

You must make sure your builder has installed a 32 mm white telecommunications conduit from the front boundary of your lot to the meter box location on the side of your house. Your builder can install this conduit, or you can arrange for OptiComm, who undertake all Optic Fibre Network Connections, to install this conduit for you. Typical costs for up to 10 metres of trenching and conduit would be $440 (GST inclusive). The OptiComm Customer Connection Information Desk can be contacted on 1300 137 800. This conduit should be installed during construction of your home.

Step 2. Prepare your home to be able to distribute the internet, telephone, television and other services throughout your rooms

Structured cabling of your home is required as it will enable you to take advantage of all features the Aquarevo Optical Fibre Network has to offer. It is recommended that you arrange a quote to

cable your new home from your builder or OptiComm's contractors early in your construction phase or at contract negotiation as the wiring should be done at the frame stage of construction. Structured cabling is an additional cost to the conduit and customer connection.

Step 3. Connection to the Optical Fibre Network

When you have received your Occupancy Permit or are about two weeks before you move in, call OptiComm's Customer Connection Information Desk on 1300 137 800 to arrange the connection to the Optical Fibre Network.

The typical customer connection cost is $550.00 incl. GST and includes the following services:

- Installation of Optical Network Terminal and the power supply unit (back-up battery not included)
- Access to free to air digital and analogue (if available) TV signals
- International television channels
- Access to Foxtel pay TV signals (if available and resident to arrange for Foxtel connection at their cost).

Step 4. Contact a retail internet and telephone service provider

Finally, the last step involves contacting a retail service provider to arrange the connection of your retail internet and telephone services. Ask the retail service provider to provide your internet and telephone services over the OptiComm Wholesale Network.

Hints when discussing your requirements:

- Tell them you are in an OptiComm Fibre Community
- Make sure you tell them you are located at Aquarevo in Lyndhurst
- Make sure you give them your full address
- Tell them whether you have moved in yet
- Advise them whether you have had OptiComm install the optic fibre and hardware in the enclosure near your meter box - this will affect the time it takes to connect services
- If speaking with Foxtel make sure you tell them you are in an OptiComm Fibre Estate and the "ONT" (Optical Network Terminal) is installed.

For further information please refer to: http://www.opticomm.net.au/

7. ENVIRODEVELOPMENT

Aquarevo has been designed and built to meet the Urban Development Institute of Australia's 'EnviroDevelopment' certification. This certification provides national independent verification of Aquarevo's sustainability performance. EnviroDevelopment annually reviews the project's ability to achieve outstanding performance across six sustainable elements;

- Ecosystem
- Waste
- Energy
- Materials
- Water
- Community

All projects which have achieved EnviroDevelopment certification have met stringent standards established by an expert panel including experienced ecologists, town planners, engineers, architects, lawyers, economists and developers. The governing Technical Standards are regularly reviewed and updated to ensure industry relevance and that all projects continue achieve outstanding performance in sustainability.

By purchasing a home within an EnviroDevelopment Project you can be assured that you are living in a community that has minimal impact on the environment, that encourages safe, healthy and active lifestyles and results in lower household energy and water costs.

Further information on EnviroDevelopment can be found at the following link:

http://www.envirodevelopment.com.au/

8. NOTES AND DEFINITIONS

8.1 NOTES ON RESTRICTIONS

- Ground level after engineering works associated with the subdivision is to be regarded as natural ground level.
- In the case of a conflict between the building envelope plan or profile diagrams and these written notations, the specifications in the written notations prevail.
- Buildings must not cover registered easements unless provided for by the easement.

8.2 GENERAL DEFINITIONS

If not defined above, the words below shall have the meaning attributed to them in the document identified.

In the *Building Act 1993:*

- Building
- Lot.

In Part 5 of *Building Regulations 2018:*

- Clear to the sky
- Height
- Private open space
- Recreational private open space
- Raised open space
- Setback
- Site coverage
- Window
- Single dwelling
- North (true north).

In the *Victoria Planning Provisions*, 31 October 2002:

- Frontage (Clause 72)
- Dwelling (Clause 74)
- Habitable room (Clause 72)
- Storey (Clause 72).

8.3 ADDITIONAL DEFINITIONS

SEW
South East Water

Edge boundary
Edge boundary means the boundary or part of a boundary of a lot on the Plan of Subdivision that abuts a lot, which is not shown on the Plan of Subdivision. An edge boundary lot is marked “E” on the building envelope plan.

Front street or **main street frontage**
Front street means the street or road that forms the frontage to the lot concerned. Where there is more than one road which adjoins a lot or where it may be otherwise unclear, the front street may be identified by the letter “F” in the building envelope plan or will be as agreed in writing by the DAP.

Side boundary
A boundary of a lot that runs between and connects the street frontage of the lot to the rear boundary of the lot.

Street
For the purposes of determining street setbacks, street means any road other than a lane, footway, alley or right of way.

Standard lot
A single lot that accommodates a freestanding house detached from adjoining houses and of an individual style.

9. BUILDING ENVELOPES

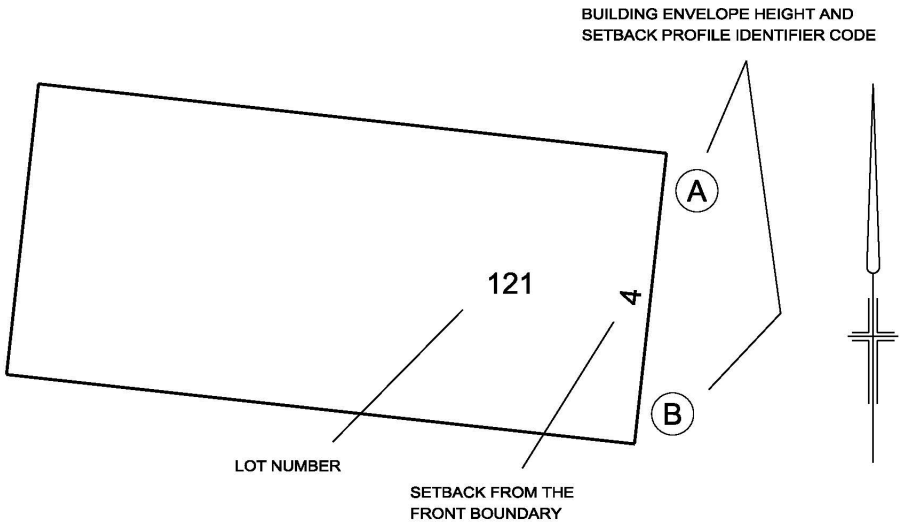
Refer to the relevant stage building envelopes.
Building regulations 73, 74 75, 79, 81, 82, 83, 84 & 85 are superseded by the Approved Building Envelopes.
To be read in conjunction with building Envelope Profiles (refer Section 9) and Aquarevo Plan of Subdivision for relevant stage.

Building Envelopes can be accessed from the following link:
http://aquarevo.villawoodproperties.com.au/building-information-4

10. BUILDING ENVELOPE PROFILES

To be read in conjunction with the Building Envelopes (refer Section 8) and Plan of Subdivision for relevant stage.

AQUAREVO CLYDE SETBACK PROFILES



THESE BUILDING ENVELOPE SETBACK PROFILES FORM PART OF THE "AQUAREVO CLYDE BUILDING DESIGN GUIDELINES." PLEASE REFER TO THESE GUIDELINES FOR FURTHER INFORMATION

EASEMENT REQUIREMENT

WHERE A PROFILE WHEN APPLIED COVERS AN EASEMENT, THE PORTION OF THE PROFILE ABOVE THE EASEMENT CANNOT BE CONSIDERED FOR APPROVAL / BUILT UPON. THIS MAY VARY ONLY IN THE CIRCUMSTANCES WHERE BUILDING ON THE EASEMENT RECEIVES PRIOR WRITTEN CONSENT OF THE RELEVANT AUTHORITY.

SINGLE STOREY BUILDING ENVELOPE HATCH TYPES

SINGLE STOREY BUILDING ENVELOPE (WALL HEIGHT NOT EXCEEDING 3.6m)

BUILDING TO BOUNDARY ZONE

DOUBLE STOREY BUILDING ENVELOPE HATCH TYPES

OVERLOOKING ZONE - HABITABLE ROOM WINDOWS OR RAISED OPEN SPACES ARE A SOURCE OF OVERLOOKING.

NON OVERLOOKING ZONE - HABITABLE ROOM WINDOWS OR RAISED OPEN SPACES ARE NOT A SOURCE OF OVERLOOKING.

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Hawthorn East Vic 3123
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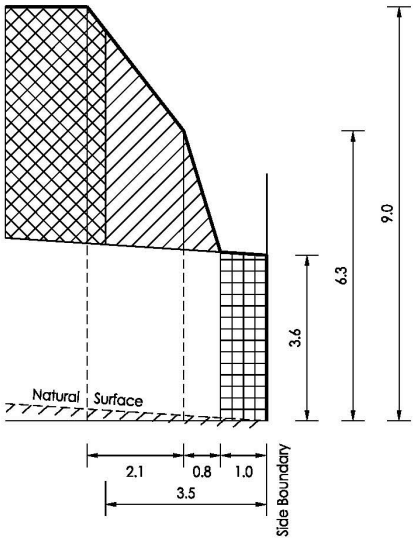
www.bpd.com.au info@bpd.com.au

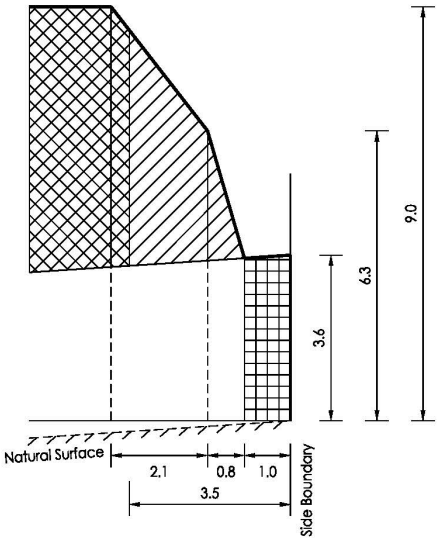
SHEET 1 OF 5 SHEETS

SETBACK PROFILES

Ⓐ Profile - NORTH, EAST or WEST Boundary

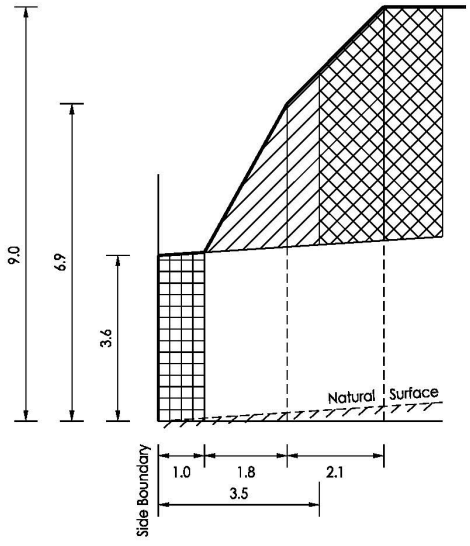


Natural Surface rising from side boundary

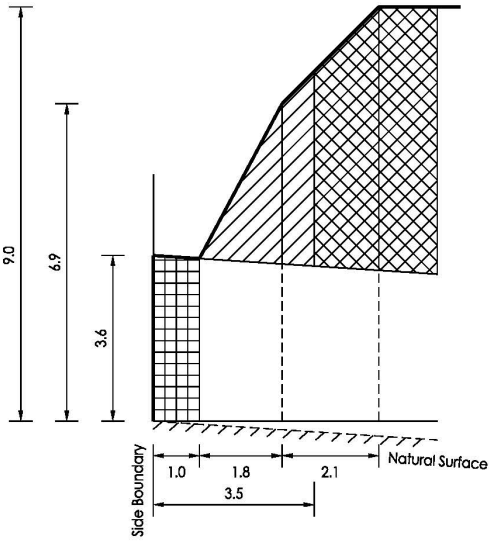


Natural Surface falling from side boundary

Ⓑ Profile - SOUTH Boundary



Natural Surface rising from side boundary



Natural Surface falling from side boundary

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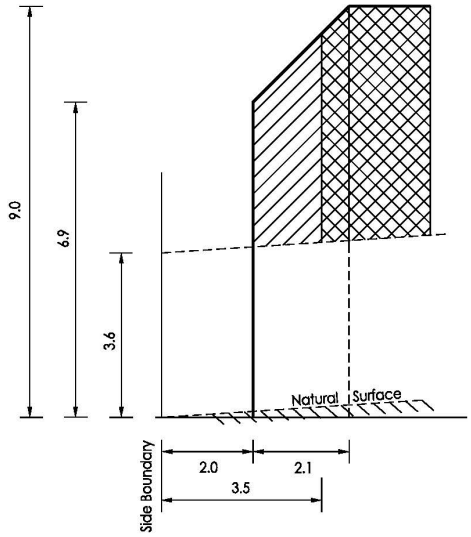
www.bpd.com.au info@bpd.com.au

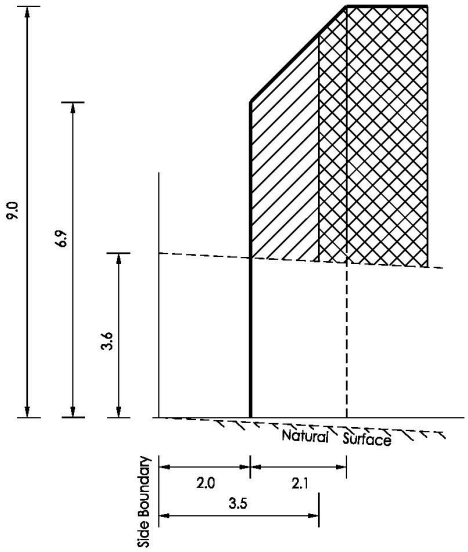
SHEET 2 OF 5 SHEETS

SETBACK PROFILES

Ⓒ Profile - NORTH, EAST or WEST Boundary

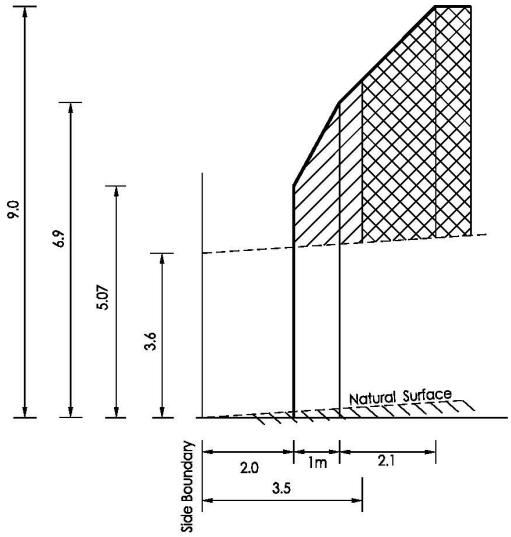


Natural Surface rising from side boundary

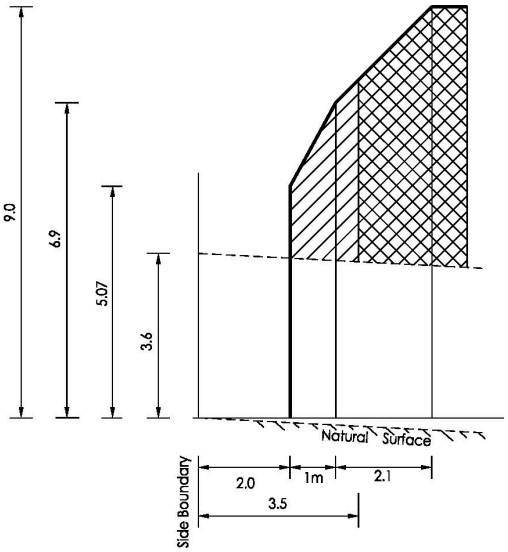


Natural Surface falling from side boundary

Ⓓ Profile - SOUTH Boundary



Natural Surface rising from side boundary



Natural Surface falling from side boundary

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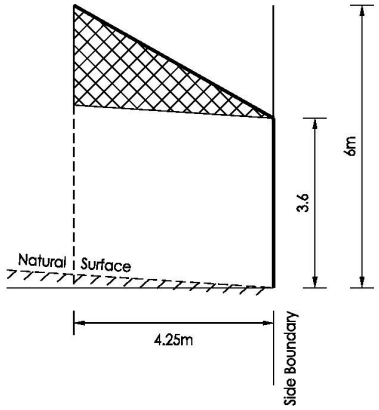
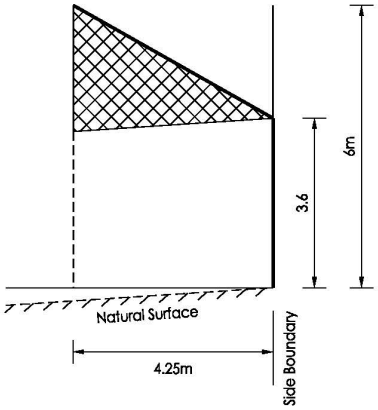
SHEET 3 OF 5 SHEETS

SETBACK PROFILES

Ⓢ Profile - SIDE BOUNDARY

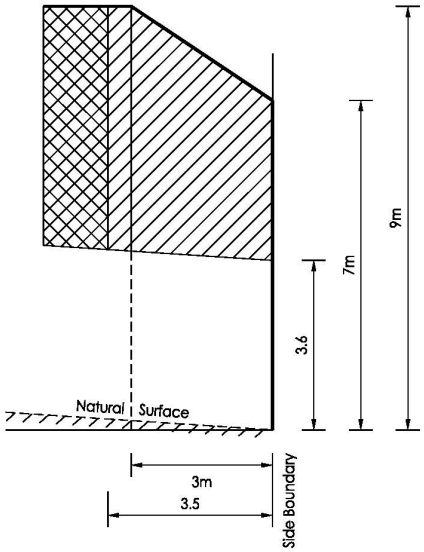


Natural Surface rising from side boundary

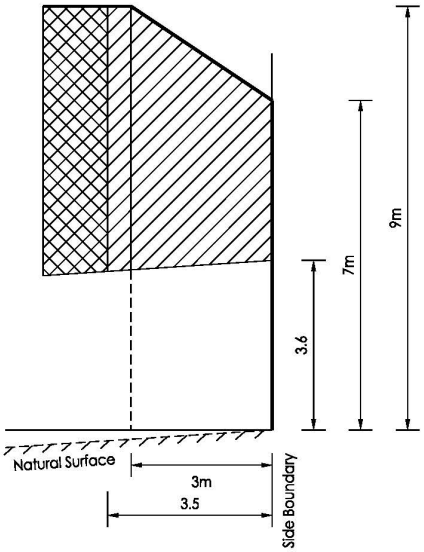


Natural Surface falling from side boundary

Ⓣ Profile - SIDE BOUNDARY



Natural Surface rising from side boundary



Natural Surface rising from side boundary

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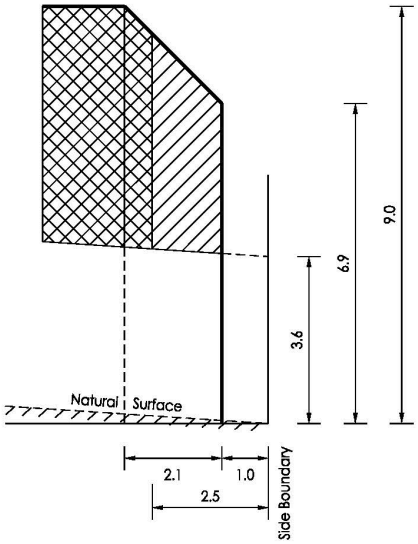
SHEET 4 OF 5 SHEETS

SETBACK PROFILES

Ⓥ Profile - NORTH, SOUTH, EAST or WEST Boundary



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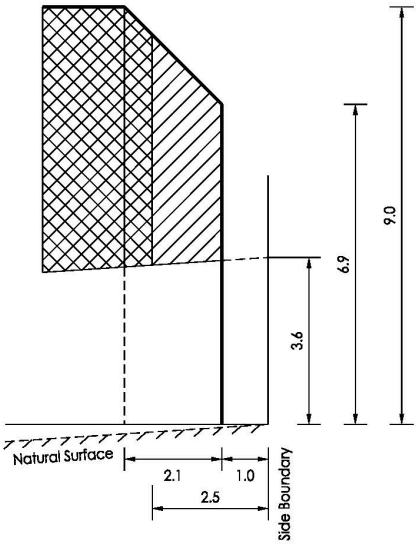

Natural Surface falling from side boundary

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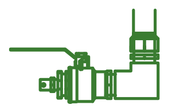
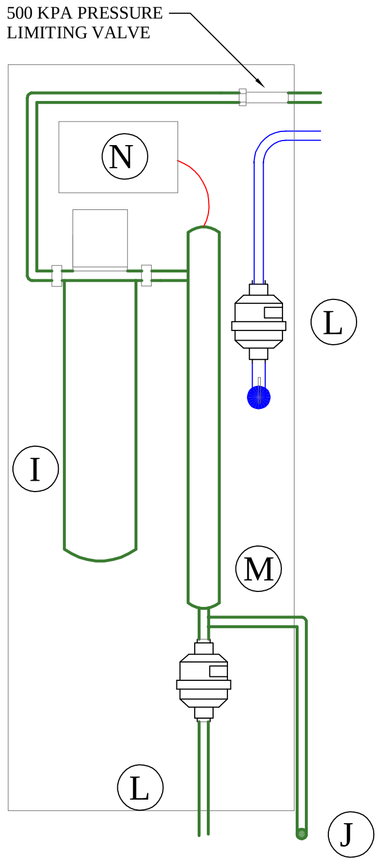
SHEET 5 OF 5 SHEETS

11. APPENDICES

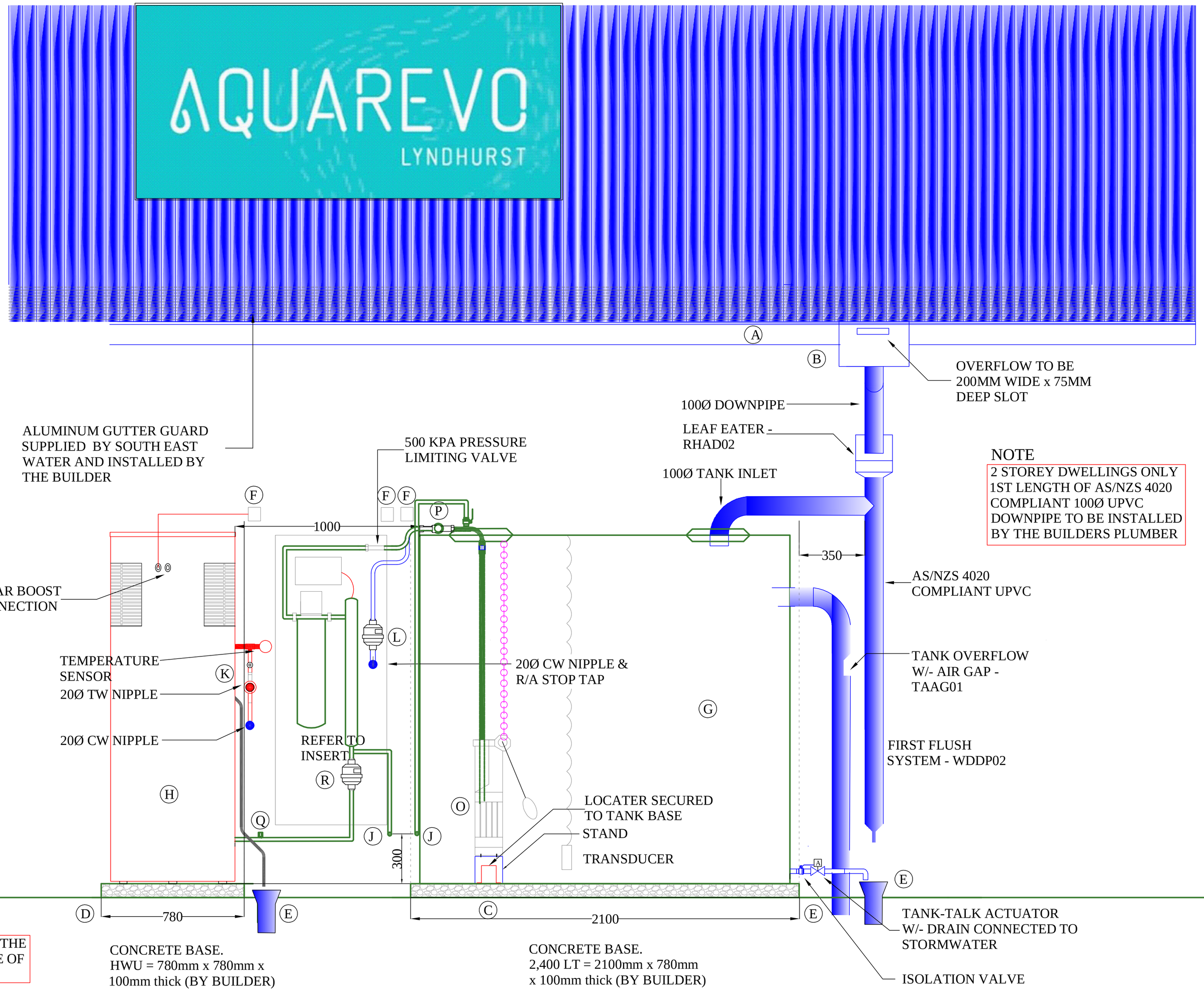
APPENDIX A – TYPICAL ARRANGEMENT



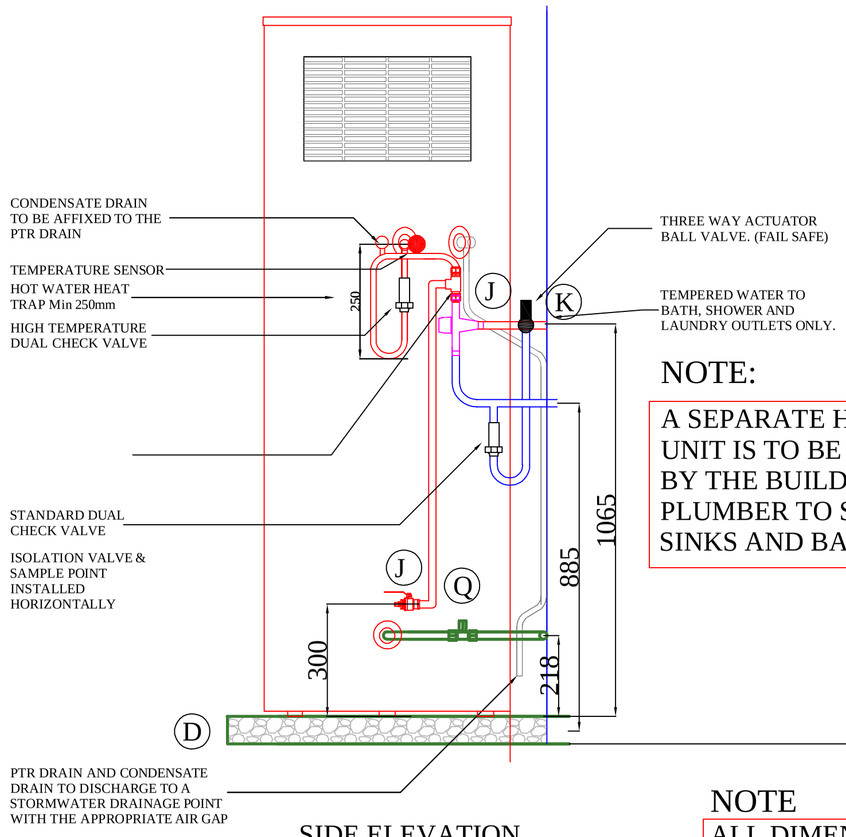
TYPICAL SAMPLE POINT
TERMINATION DETAIL



PANEL DETAIL



NOTE
2 STOREY DWELLINGS ONLY
1ST LENGTH OF AS/NZS 4020
COMPLIANT 100Ø UPVC
DOWNPIPE TO BE INSTALLED
BY THE BUILDERS PLUMBER



SIDE ELEVATION

NOTE:

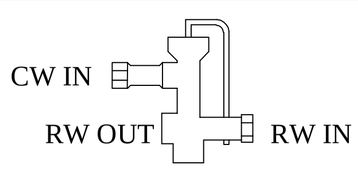
A SEPARATE HOT WATER UNIT IS TO BE INSTALLED BY THE BUILDERS PLUMBER TO SUPPLY ALL SINKS AND BASINS

NOTE

ALL DIMENSIONS FROM THE EDGE AND TOP SURFACE OF THE SUPPORTING SLABS

CONCRETE BASE.
HWU = 780mm x 780mm x
100mm thick (BY BUILDER)

CONCRETE BASE.
2,400 LT = 2100mm x 780mm
x 100mm thick (BY BUILDER)



AQUA SAVER
AUTOMATIC HYDRAULIC
SWITCHING DEVICE
COMPLETE WITH
BACKFLOW DEVICE

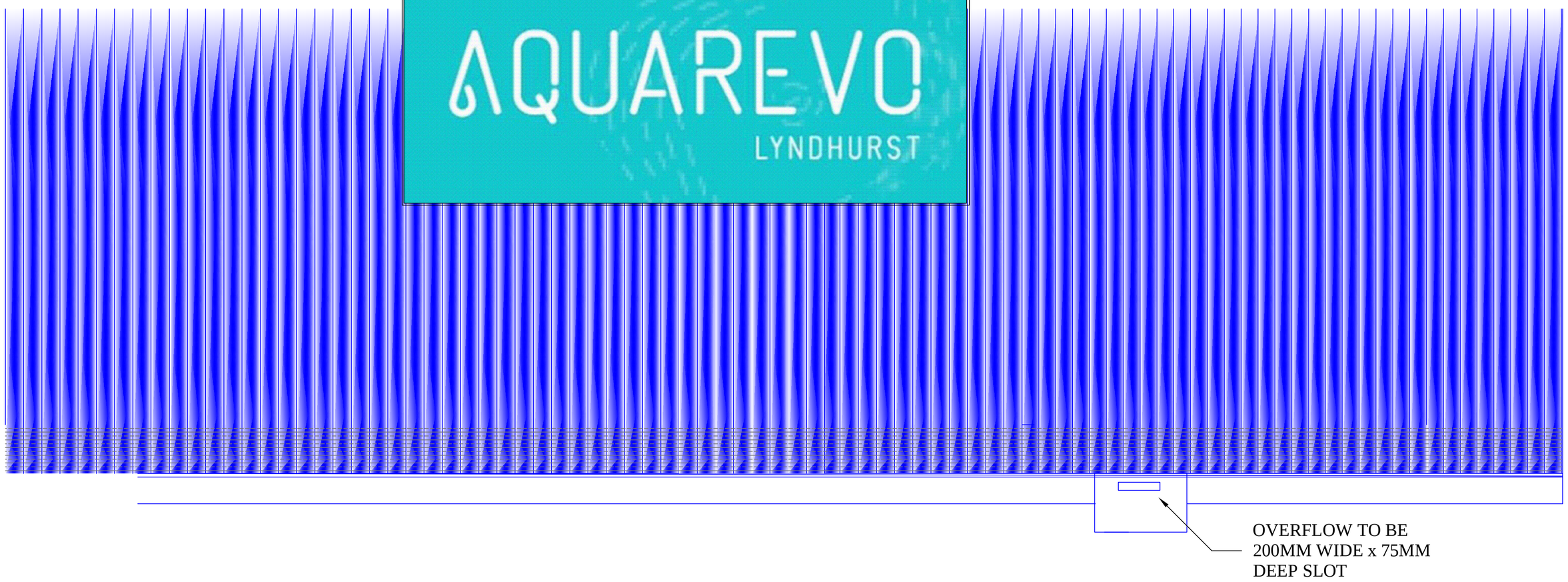
hmm
inspection services pty ltd
email: admin@hmmgroup.com.au
postal: p.o box 537, burwood.vic 3125
ph: 9887 8414
mob: 0432 663 147

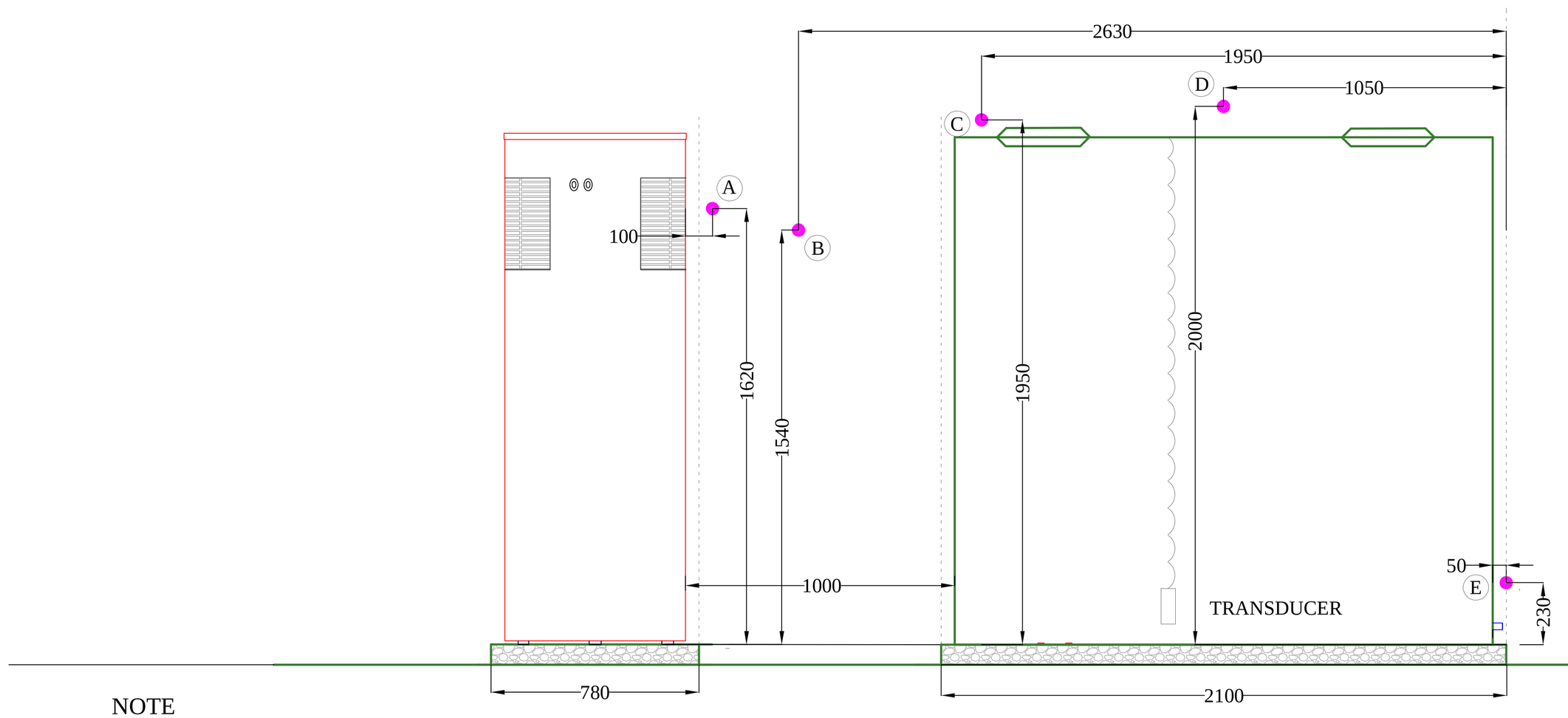
South East Water

AQUAREVO
SOUTH EAST WATER
TYPICAL ARRANGEMENT

version J - 19-02-2019

APPENDIX B – TYPICAL ARRANGEMENT





LEGEND

A	Hot water outlet temp CT Hot water service Bypass valve hot water Bypass valve cold water Solar Boost
B	UV System alarm UV Intensity Hot water pulse Potable back up pulse
C	Rainwater tank pump control
D	Tank Talk level sensor
E	Tank Talk drain valve (open/close)
F	Gas check pulse (heating)
G	Main gas meter pulse
H	Hot water gas pulse

Note:
F, G & H will be located as per house plan

NOTE
ALL DIMENSIONS FROM THE EDGE AND TOP SURFACE OF THE SUPPORTING SLABS

CONCRETE BASE.
HWU = 780mm x 780mm x 100mm thick (BY BUILDER)

CONCRETE BASE.
2,400 LT = 2100mm x 780mm x 100mm thick (BY BUILDER)

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mob: 0432 663 147

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BUILDER - CABLE TYPICAL ARRANGEMENT

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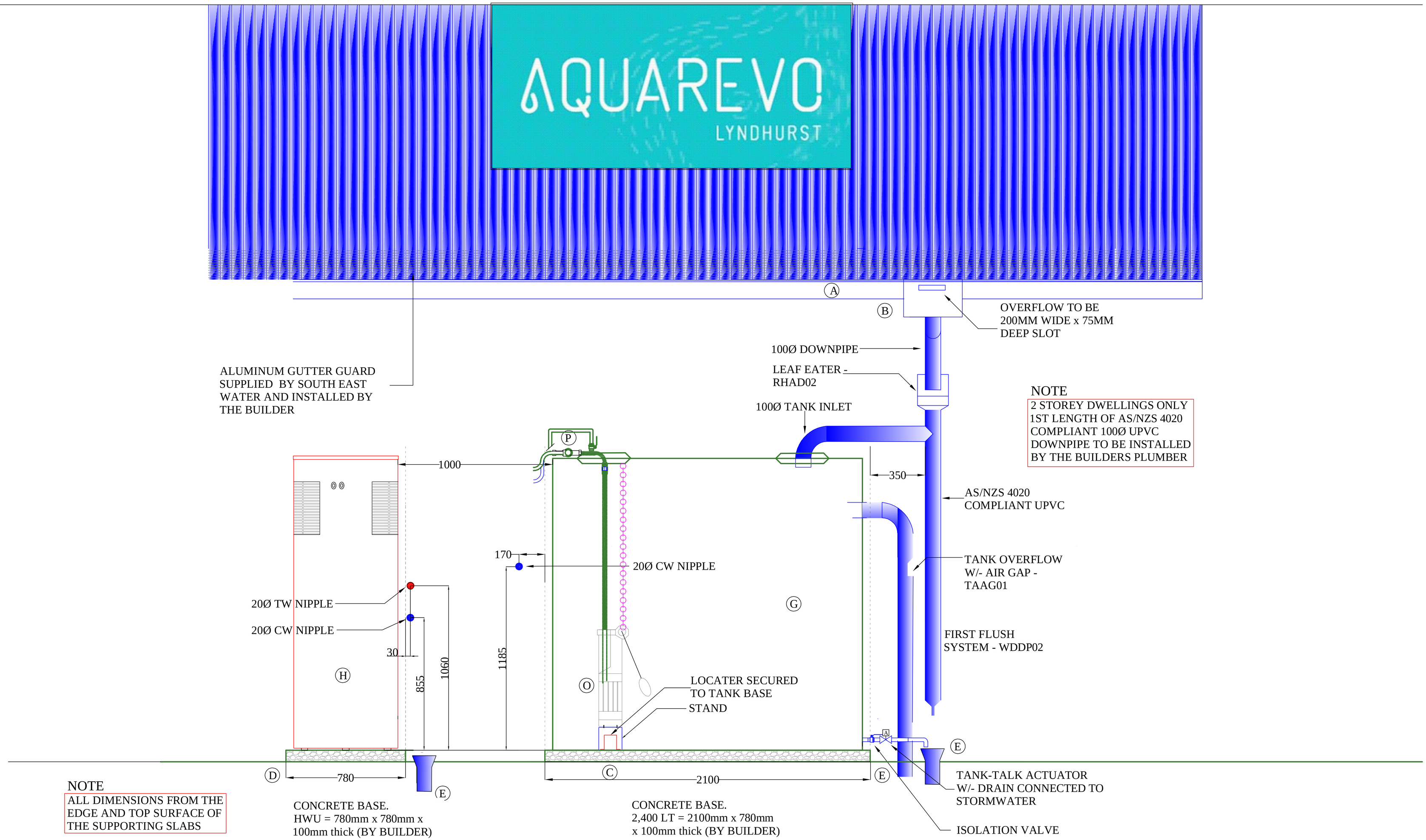

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ph: 9887 8414
mob: 0432 663 147

South East Water

AQUAREVO

BUILDER - WATER
TYPICAL ARRANGEMENT

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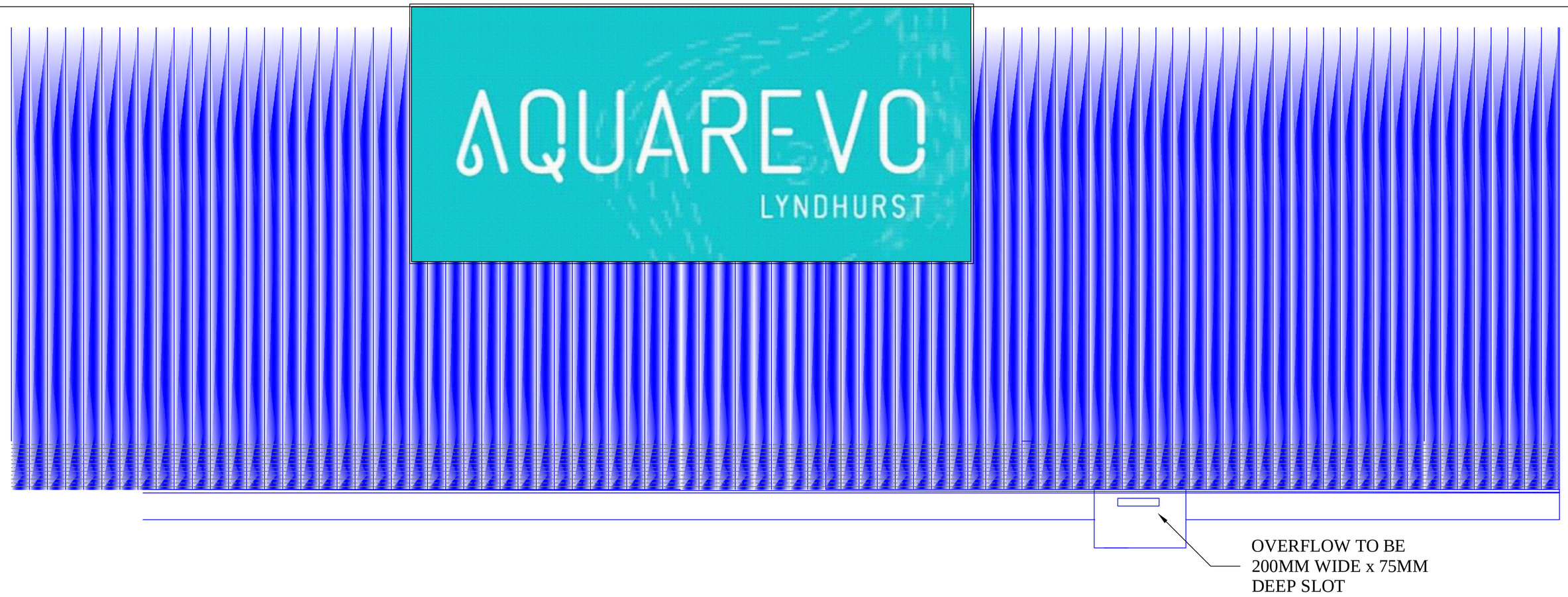

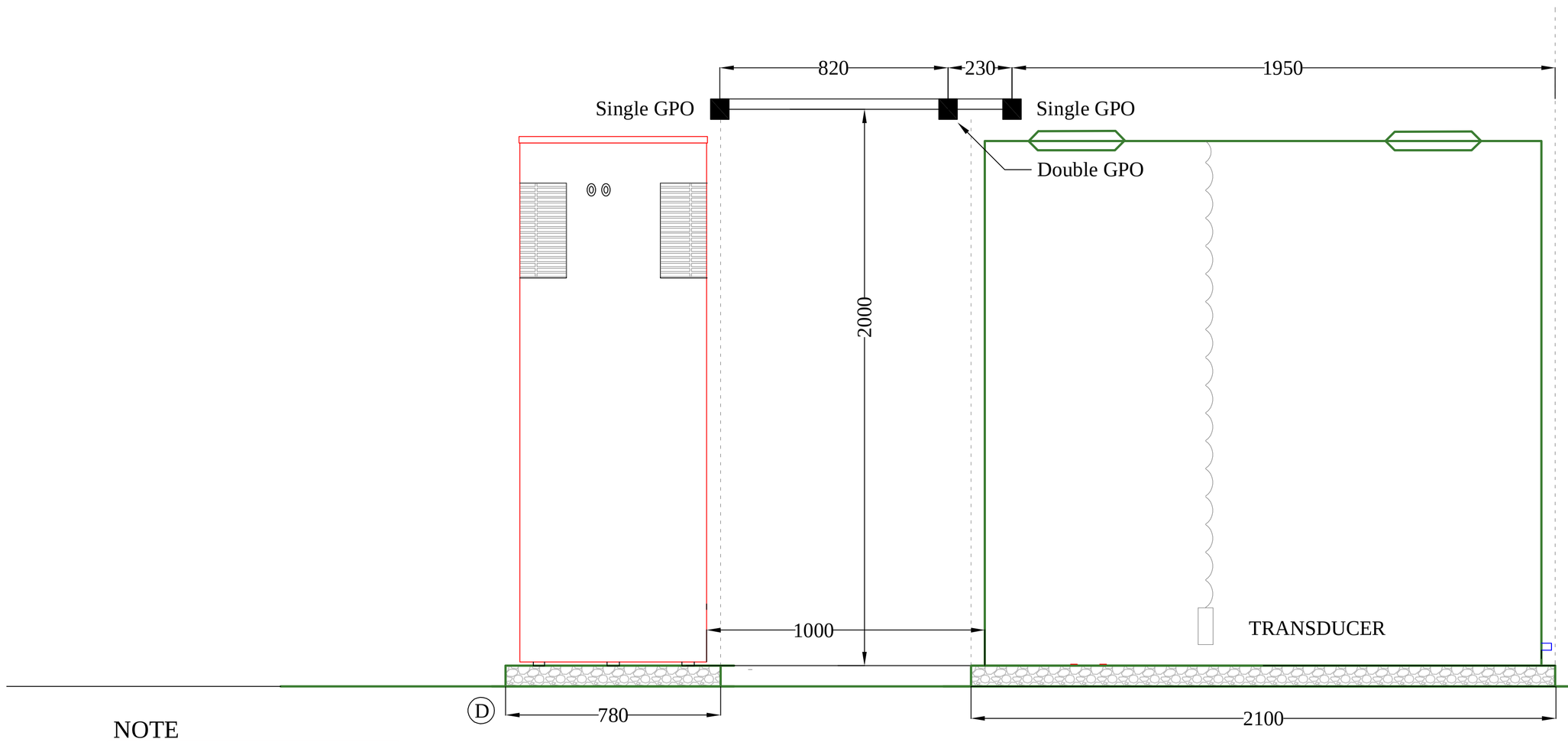

3 DEDICATED ELECTRICAL CIRCUITS INSTALLED INDIVIDUALLY TO THE METER BOX (EXTERNAL TO THE DWELLING)

. HWS (SINGLE GPO)
. UV SYSTEM (DOUBLE GPO)
. RAINWATER TANK (SINGLE GPO)

NOTE

ALL DIMENSIONS FROM THE EDGE AND TOP SURFACE OF THE SUPPORTING SLABS

CONCRETE BASE.
HWU = 780mm x 780mm x
100mm thick (BY BUILDER)

CONCRETE BASE.
2,400 LT = 2100mm x 780mm
x 100mm thick (BY BUILDER)

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mob: 0432 663 147

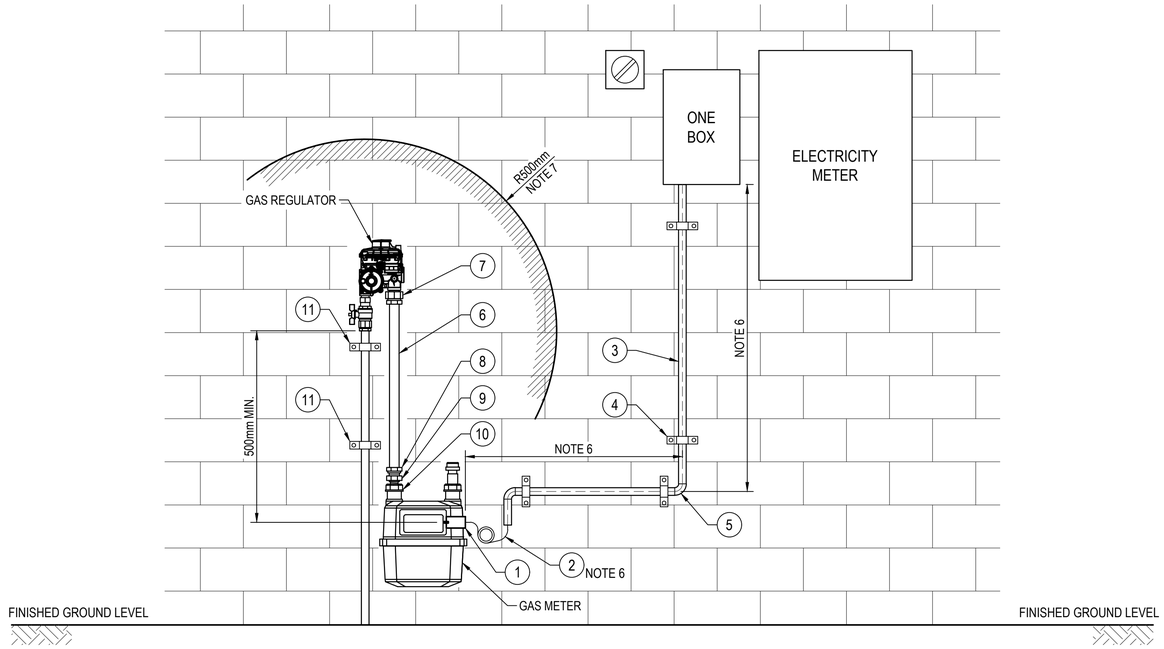
South East Water

AQUAREVO

BUILDER - GPO
TYPICAL ARRANGEMENT

version J - 19-02-2019

APPENDIX C – APA GAS METER PLAN



OPTION 2 - VERTICAL SEPARATION OF GAS REGULATOR AND METER

NOT TO SCALE

BILL OF MATERIALS

ITEM	DESCRIPTION	SPECIFICATION	QTY	PRICE	NOTES	PRICING CONFIDENCE
1	METER INDEX	LANDIS & GYR (IN-Z41)		$ 83.00	NOTE 1	CONFIRMED BY L&G
2	METER PULSE CABLE	SUPPLIED WITH ABOVE	1.5m	-	NOTE 6	-
3	CABLE CONDUIT	RIGID PVC, 20mm		$ 2.00		ORACLE/BLACKWOODS PRICE
4	CONDUIT SADDLES	SADDLE HALF, ZINC PLATED, 20mm		$ 1.00		ORACLE/BLACKWOODS PRICE
5	ELBOWS	PVC SOLID 20mm GREY		$ 1.00		ORACLE/BLACKWOODS PRICE
6	EXTENSION PIPE	25mm COPPER, AS1432B (MAXIMO PART # 1010180)	500mm	$ 1.00	NOTE 2	INVENTORY ITEM
7	MALE BRASS STRAIGHT CONNECTOR	25mm TUBE x 20mm BSP, (GAS COMPONENT QLD PART # T31612)	1	$ 2.50	NOTE 2	CONFIRMED BY FACILITIES ENGINEERING
8	FEMALE BRASS STRAIGHT CONNECTOR	25mm TUBE x 25mm BSP, (GAS COMPONENT QLD PART # T21616)	1	$ 4.50	NOTE 2	CONFIRMED BY FACILITIES ENGINEERING
9	REDUCING BUSH	25mm MALE x 20mm FEMALE BSP, (GAS COMPONENTS QLD PART # 2412)	1	$ 4.00	NOTE 2	CONFIRMED BY FACILITIES ENGINEERING
10	METER ADAPTOR	20mm MALE BSPT x 10LT, (LANDIS & GYR PART # SK5)	1	$ 6.50	NOTE 2	CONFIRMED BY FACILITIES ENGINEERING
11	FITTINGS/CONSUMABLES	20mm SADDLE	2	$ 1.00		CONFIRMED BY FACILITIES ENGINEERING
12	UPSTAND ADDITIONAL COST	CLARE IND, 1.8m LENGTH COPPER UPSTAND		$ 10.00		EXTRA COST FOR 1.8m UPSTAND - CONFIRMED BY CLARE IND
13	LABOUR COST TO FABRICATE EXTENSION PIPE	APA WORKSHOP QLD		$ 40.00	NOTE 2	-
14	ADDITIONAL SERVICE LAYING COST			$ 86.90		PROVIDED BY PM
15	ADDITIONAL METER INSTALLATION COST			-		NO ADDITIONAL SCOPE FOR METER INSTALLERS, CONFIRMED BY OPERATIONS
16	ADDITIONAL ELECTRICAL INSTALLATION			$ 80.00	NOTE 3	ESTIMATE ONLY 30 MIN.
TOTAL				$ 323.40		

INSTALLATION METHOD:

SERVICE UPSTAND OF NON-STANDARD LENGTH (1.8m) INSTALLED ALONG THE HOUSE WALL. PIPE EXTENSION OF 500MM MINIMUM INSTALLED AS PER DRAWING TO PROVIDE VERTICAL SEPARATION BETWEEN THE SERVICE REGULATOR AND GAS METER TO SEPARATE THE REGULATOR / INLET PRESSURE FROM THE METER PULSE INDEX.

NOTES:

1. LANDIS & GYR METERS TO BE PROCURED PRE-INSTALLED WITH IN-Z41 PULSE INDEXES. IN-Z41 COMES WITH 1.5m FLYING LEAD. OPERATIONS AND STORES IN VICTORIA TO BE NOTIFIED OF THE PROJECT THE METERS ARE ASSIGNED TO.
2. EXTENSION SPOOL TO BE:
   - FABRICATED IN APA NETWORKS EAGLE FARM SHOP
   - OVERALL LENGTH TO BE KEPT 500mm.
   - LABOUR TIME TO FABRICATE THE SPOOL IS APPROXIMATELY 30 MINUTES. THIS TIME DOES NOT INCLUDE THE PRESSURE TESTING.
   - SK5 IS THE PART OF REGULATOR
3. ESTIMATE BASED ON COST OF INTERNAL LABOUR, TO BE CONFIRMED WITH THE CONTRACTORS IN VICTORIA.
4. SEPARATION ZONE OF 500mm IS ONLY APPLICABLE FOR REGULATORS POINTING AWAY FROM THE WALL. IN ALL OTHER CASES THE REGULATOR HAZARDOUS ZONE IS A CYLINDER OF 1m DIAMETER, EXTENDING FROM 1m BEHIND THE DISCHARGE TO 1.5m IN FRONT OF DISCHARGE.
5. BILL OF MATERIALS IS FOR AN ADDITIONAL COST PER INSTALLATION, APPROXIMATE ONLY.
6. ENSURE INSTALLATION POSITION OF 'ONE-BOX' CONTROLLER ALLOWS FOR THE 1.5m FLYING LEAD. FINAL POSITION OF 'ONE-BOX' SHALL BE AGREED ON SITE.
7. MINIMUM DISTANCE OF 500mm BETWEEN HIGH PRESSURE CONNECTION OF REGULATOR AND 'ONE-BOX', MUST BE MAINTAINED.
8. LANDIS & GYR METER TYPES: 750 OR 1010, PROVIDE 1 PULSE PER 10 LITRES (0.01m³) OF GAS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

REV	PROJ No	REVISION	DATE	DRW	DES	CHK	APP	REFERENCE DRGs	DRG No
B		FOR INFORMATION ONLY	03/05/18	J.B	S.G	M.O	M.O		
A		FOR INFORMATION ONLY	14/03/18	J.B	S.G	S.G	M.O		

Australian Gas Networks — operated by apa

	NAME	DATE
DRAWN	J.BAQUERO	
DESIGNED	S.GREENWAY	
VALIDATED		
ACCEPTED		

A1

SCALE N.T.S

APA NETWORKS

DOMESTIC GAS METER INSTALLATION OPTIONS

AQUAREVO LYNDHURST DEVELOPMENT G.A

PROJECT No	DRG No	REV
	OPTION 2	B

APPENDIX D – RESPONSIBILITY SUMMARY

Appendix C

AQUAREVO
LYNDHURST

Index Set Out Plans

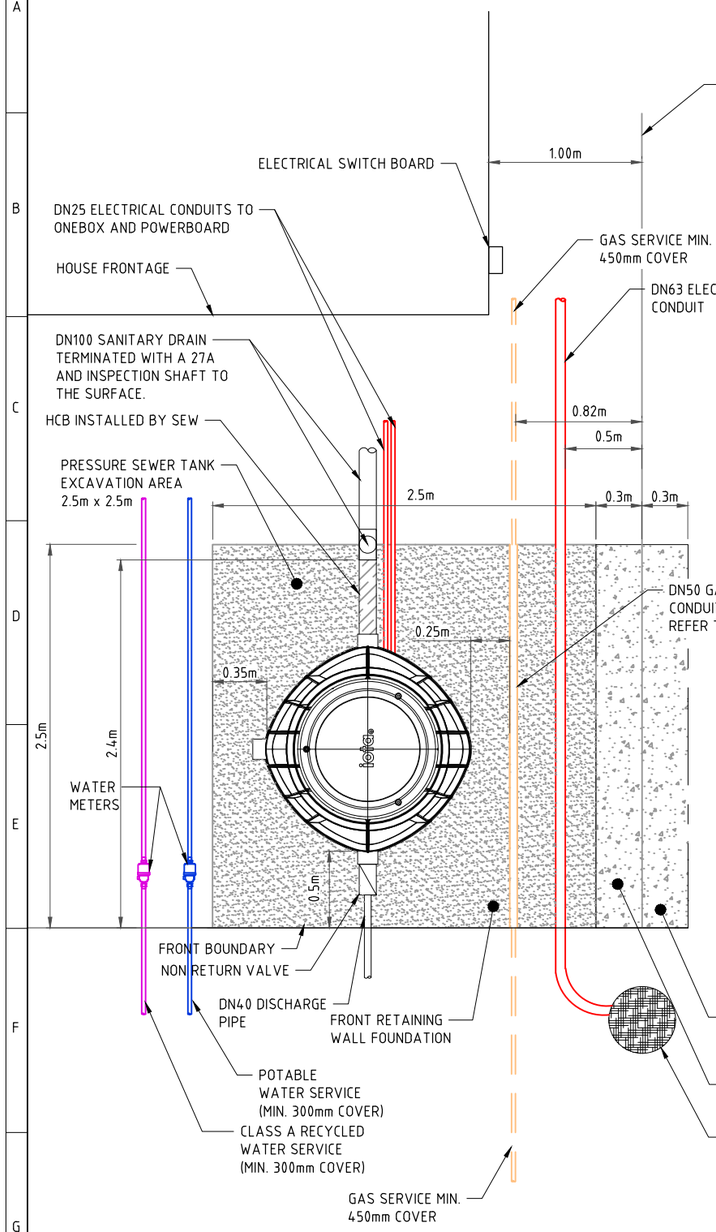
ITEM	COMPONENT	RESPONSIBILITY OF BUILDER	RESPONSIBILITY OF SOUTH EAST WATER
A	Roof gutters	Supply deliver and install	
B	Rain head (400x300x250mm)	Supply, deliver and install	
C	Tank Slab (780x2100x100mm)	Supply deliver and install	
D	Hot water unit slab (780x780x100)	Supply deliver and install	
E	Stormwater inlet Drains (3 No.)	Supply deliver and install	
F	Electrical power points (3 No.) Separate circuits	Supply deliver and install	
G	2400 litre steel plate Rainwater tank with a usable capacity of 2000 litres (720mmx2000mmx1860mm)		Supply deliver and install
H	Heat pump / Hot water unit (690mm diameter x 1925mm high)		Supply deliver and install
I	All components required to treat / filter rainwater - Complete with Equipment Security Cover)		Supply deliver and install
J	Sample Point (3 No.)		Supply deliver and install
K	20mm Tempering Valve		Supply deliver and install
L	20mm Pulse meter (drinking water backup)		Supply deliver and install
M	UV filtration		Supply deliver and install
N	UV Filtration (Control Box)		Supply deliver and install
O	Submersible Pump		Supply deliver and install
P	Automatic Hydraulic Switching Device complete with Backflow protection		Supply deliver and install
Q	20mm Duo valve		Supply deliver and install
R	20mm Pulse meter (cold water delivery to heat pump)		Supply deliver and install

N.B. Components itemised refer to those labelled in Set-Out Drawings (Appendix A & B)

APPENDIX E – PRESSURE SEWER POD OFFSET

NOTES:

1. NO BUILDINGS WITHIN A HORIZONTAL DISTANCE OF 2.0M FROM PRESSURE SEWER POD.
2. MIN. 150mm VERTICAL CLEARANCE FROM GAS SERVICE WHEN CROSSING AND 250mm WHEN IN PARALLEL WITH GAS SERVICE.
3. 50mm GAS SERVICE CONDUIT INSTALLED BY SOUTH EAST WATER AT TIME OF PRESSURE SEWER POD INSTALLATION.



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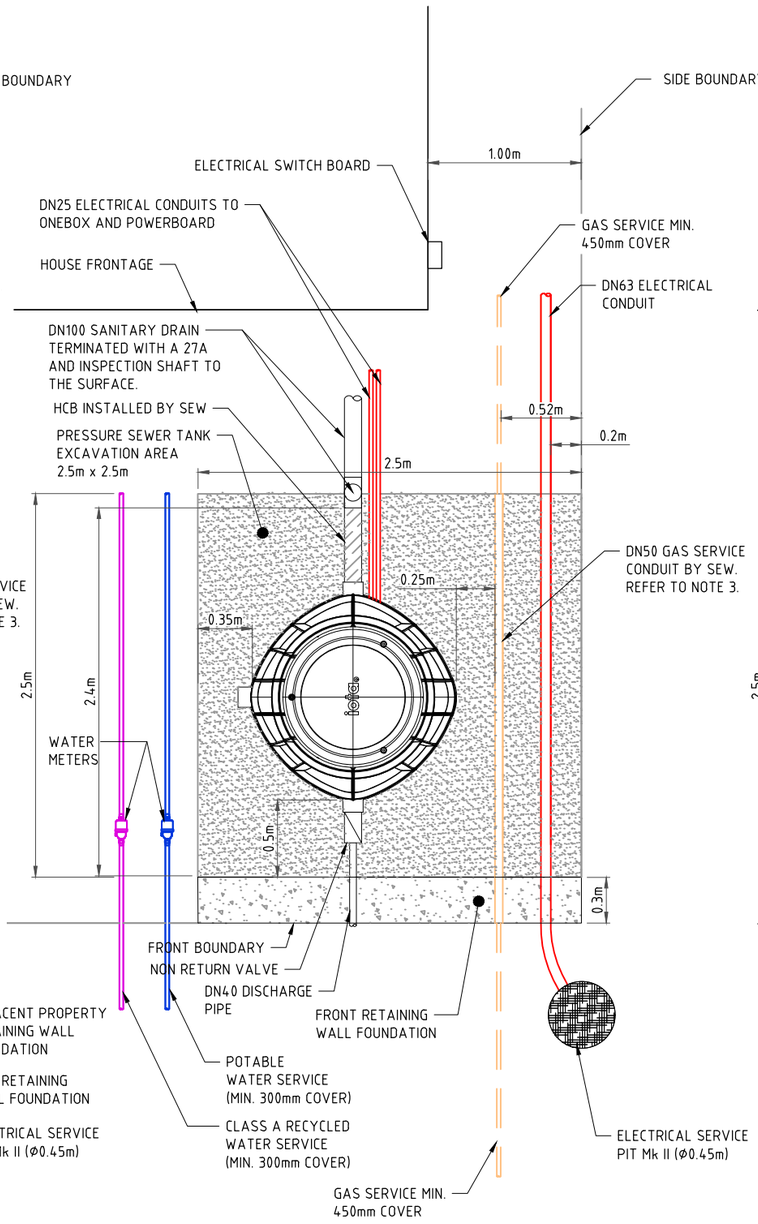
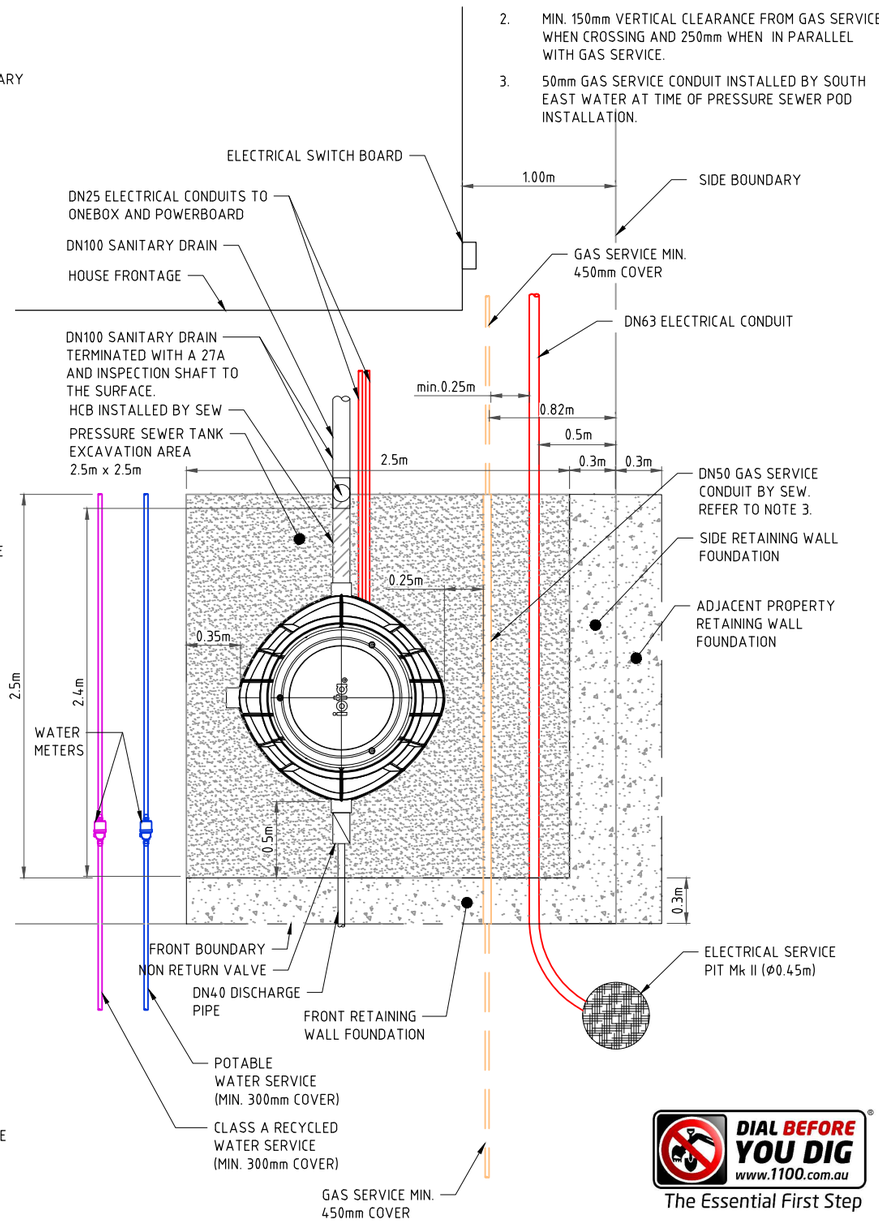
SCALE 1:20



TYPE 2
SCALE 1:20



TYPE 3
SCALE 1:20

0 0.2 0.4 0.6 0.8 1 Meters
FOR A1 SIZE PLOT - SCALE 1:20

DIAL BEFORE YOU DIG www.1100.com.au
The Essential First Step

WARNING

BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHALL BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

FOR CONSTRUCTION

REV	ZONE	DESCRIPTION	DATE	DESIGNED	DRAWN	DES. CHK.	DRAFT CHK.
				-	-	-	-
				-	-	-	-
C2		NON RETURN VALVE AND 27A ADDED	26/02/19	-	-	-	-
C1		REVISED HORIZONTAL DISTANCE TO BUILDING	1/08/18	MN	MN	DJ	CD
C0		ISSUED FOR PREPARATION OF DESIGN GUIDELINES	20/3/18	MN	MN	DJ	CD

South East Water Corporation
WatersEdge 101 Wells Street
Frankston VIC 3199
T 61 3 9552 3000 F 61 3 9552 3001
E info@sew.com.au www.sew.com.au

MELWAY REF: N/A | SHEET SIZE: A1 (FULL SIZE PLOT) | APPROVED:

SOUTH EAST WATER CORPORATION
TYPICAL PRESSURE SEWER CONNECTIONS SHORT CONNECTION FOR LOTS WITH FRONT & SIDE BOUNDARY RETAINING WALLS

PLAN TYPE: CIVIL
SCALE: N.T.S.
DRAWING NUMBER
PSAQUA-C-001 | 0000
NUMERAL | REV

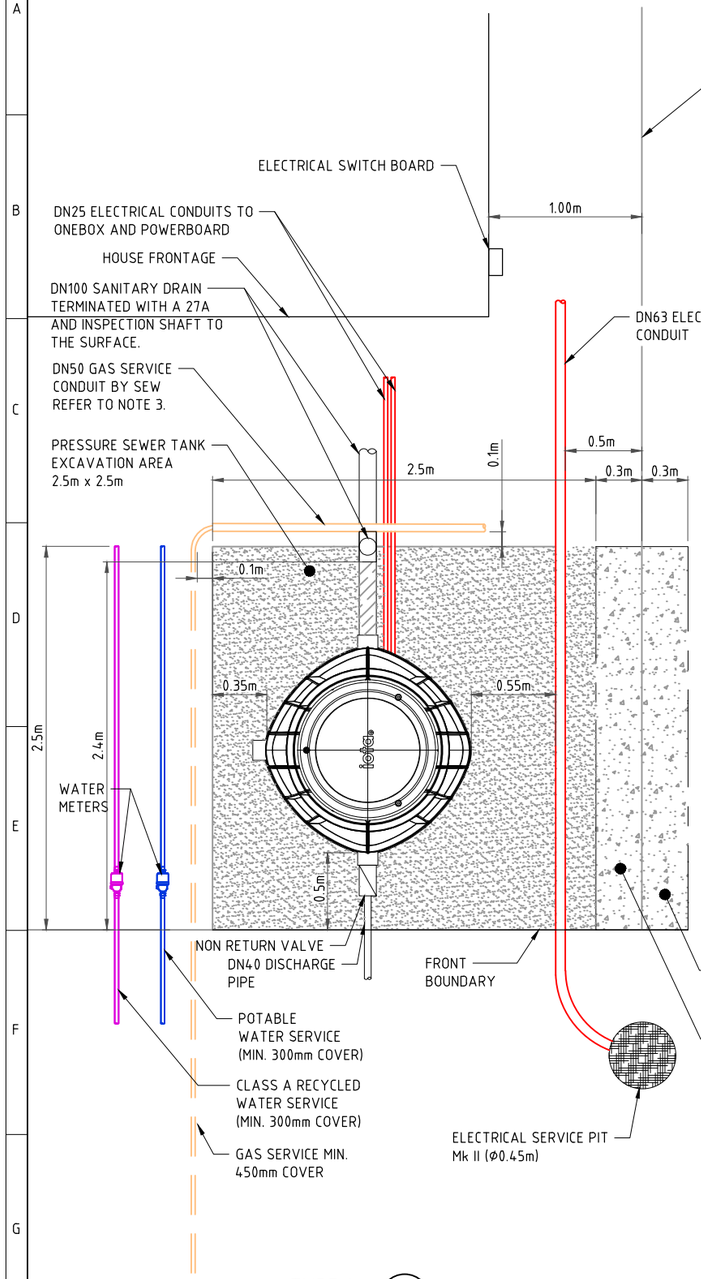
CAD FILE NAME: P:\Shared\Squares\ PSAQUA-C-001 Short Connection.dwg
Plotted @ 26/2/2019 11:37am by mnedomac

THE ORIGINAL DRAWING WAS HAND SIGNED BY THE PERSON WHOSE NAME OR INITIALS APPEAR PRINTED AND MARKED THUS (#) IN THE SIGNATURE BLOCKS.

DO NOT SCALE - IF IN DOUBT, ASK
ORIGINAL SIZE A1

NOTES:

1. NO BUILDINGS WITHIN A HORIZONTAL DISTANCE OF 2.0M FROM PRESSURE SEWER POD.
2. MIN. 150mm VERTICAL CLEARANCE FROM GAS SERVICE WHEN CROSSING AND 250mm WHEN IN PARALLEL WITH GAS SERVICE.
3. 50mm GAS SERVICE CONDUIT INSTALLED BY SOUTH EAST WATER AT TIME OF PRESSURE SEWER POD INSTALLATION.



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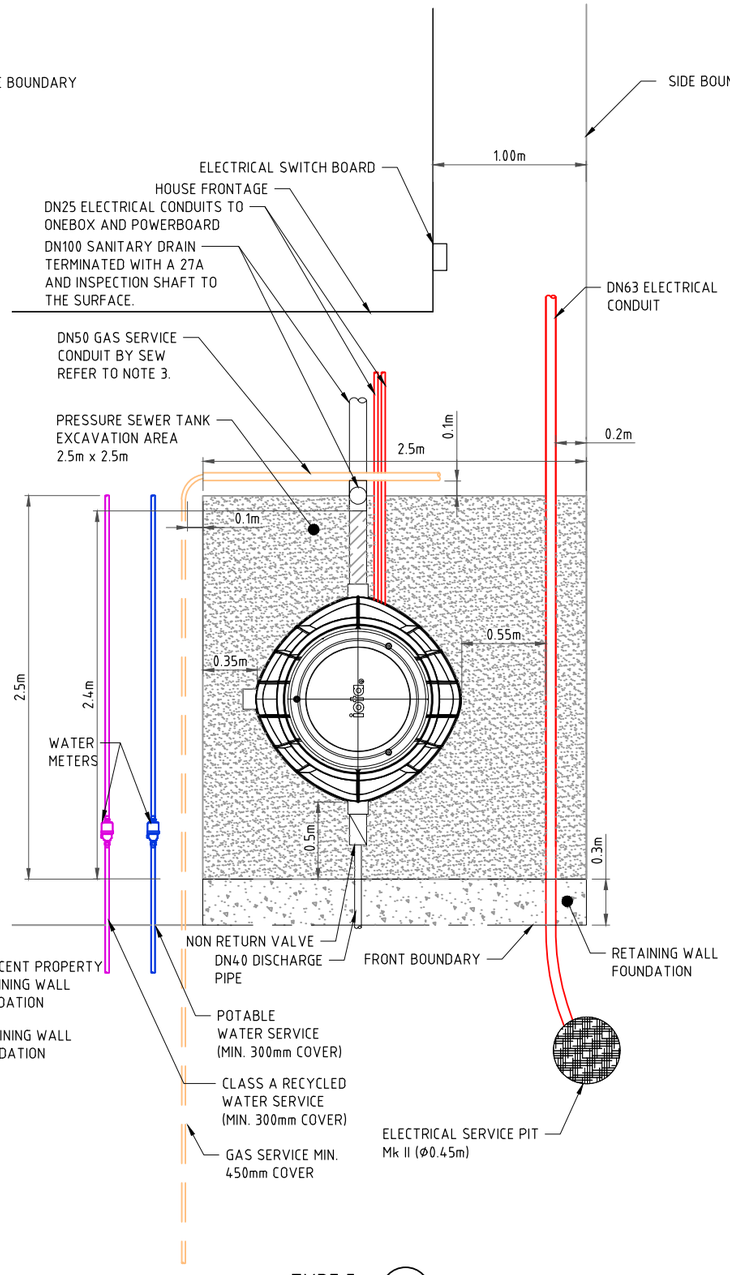

TYPE 5
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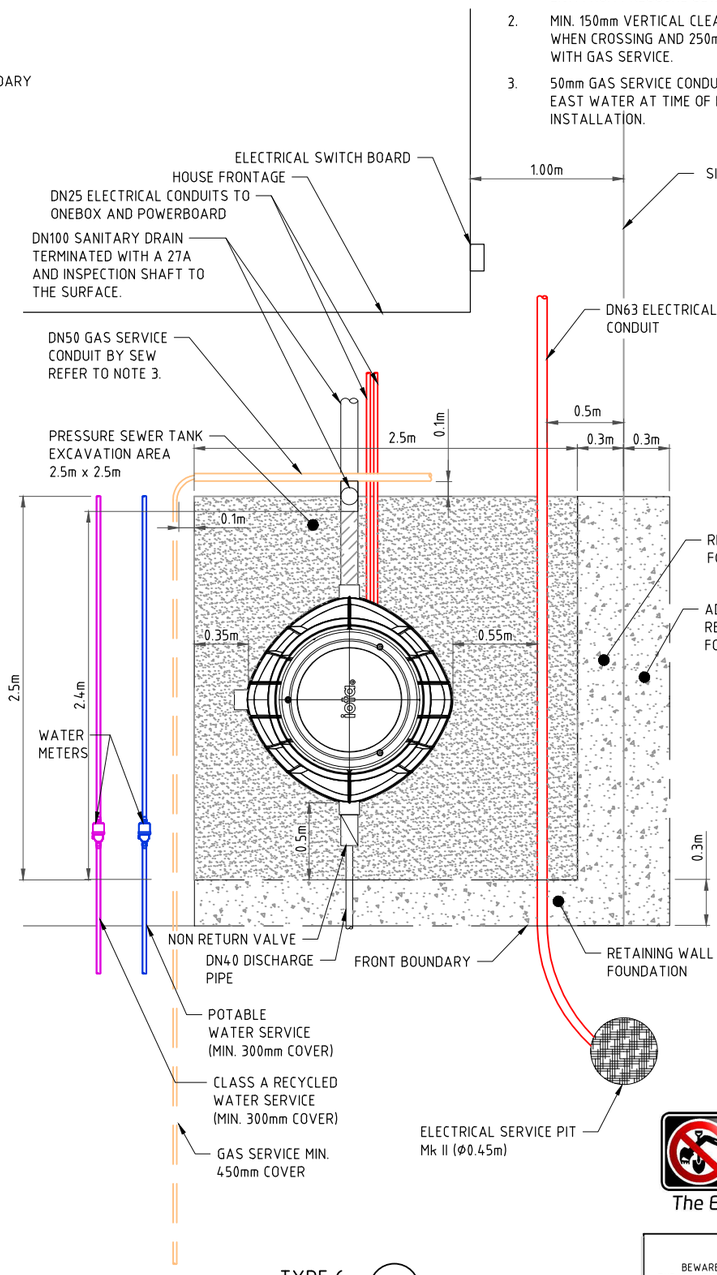

TYPE 6
SCALE 1:20

0 0.2 0.4 0.6 0.8 1 Meters
FOR A1 SIZE PLOT - SCALE 1:20

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The Essential First Step

WARNING
BEWARE OF UNDERGROUND SERVICES
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PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

REV	ZONE	DESCRIPTION	DATE	DESIGNED	DRAWN	DES. CHK.	DRAFT CHK.
				-	-	-	-
				-	-	-	-
C2		NON RETURN VALVE AND 27A ADDED	26/02/19	-	-	-	-
C1		REVISED HORIZONTAL DISTANCE TO BUILDING	1/08/18	MN	MN	DJ	CD
C0		ISSUED FOR PREPARATION OF DESIGN GUIDELINES	20/3/18	MN	MN	DJ	CD

South East Water Corporation
WatersEdge 101 Wells Street
Frankston VIC 3199
T 61 3 9552 3000 F 61 3 9552 3001
E info@sew.com.au www.sew.com.au

MELWAY REF: N/A | SHEET SIZE: A1 (FULL SIZE PLOT) | APPROVED:

SOUTH EAST WATER CORPORATION
TYPICAL PRESSURE SEWER CONNECTIONS LONG CONNECTION FOR LOTS WITH FRONT & SIDE BOUNDARY RETAINING WALLS

PLAN TYPE: CIVIL
SCALE: N.T.S.
DRAWING NUMBER
PSAQUA-C-002 | 0000
NUMERAL | REV

CAD FILE NAME: P:\Shared\Maureen\ PSAQUA-C-002 Long Connection.dwg
Plotted @ 26/2/2019 11:55am by mnedomac

THE ORIGINAL DRAWING WAS HAND SIGNED BY THE PERSON WHOSE NAME OR INITIALS APPEAR PRINTED AND MARKED THUS (#) IN THE SIGNATURE BLOCKS.

DO NOT SCALE - IF IN DOUBT, ASK
ORIGINAL SIZE A1

APPENDIX F – COLORBOND AQUAPLATE TANK COLOURS

Colours

Bluescope Colorbond Aquaplate is a specialised tank making material developed by Bluescope Steel.
Available colour range is limited to a range of 10 colours as displayed below:

Any other coloured tank can be supplied by spray painting the tank - P.O.A.

AVAILABLE in Colorbond Aquaplate

- CLASSIC CREAM™
- SURFMIST®
- PAPERBARK®
- JASPER®
- WOODLAND GREY®
- WINDSPRAY®
- MONUMENT®
- DEEP OCEAN®
- WILDERNESS
- PALE EUCALYPT®

NOT AVAILABLE in Colorbond Aquaplate

- EVENING HAZE®
- DUNE®
- COVE™
- GULLY™
- WALLABY™
- BASALT™
- SHALE GREY™
- TERRAIN®
- NIGHT SKY®
- IRONSTONE®
- MANOR RED
- COTTAGE GREEN
- MANGROVE™

Note: Printing these colours may not give an accurate representation. For best colour matching, ask for a colour chip

APPENDIX G – BUILDER CHECKLIST

AQUAREVO
LYNDHURST

Builder Checklist

NOTE: to be submitted with every DAP application - applications will not be reviewed with out this form being submitted	
Builder Details	
Builder Contact Details	
Stage Number	
lot #	

Water Initiative Requirements	*Yes* if Shown on plans	Details / Comments
location of sewer pod shown		
one box location is it in sight line with sewer pod		
ubi box location is shown		
electrical requirements for ubi considered/shown		
electrical meter boxes (internal and external) location shown and service cable location between electrical pit and external meter box shown as per Appendices in DGLs		
gas meter/s location shown confirming required clearances from ignition sources as per APA drawings within DGLs		
location and type of gas ducted heating unit if fitted		
area of roof catchment details provided and shown on plan incl calculations		
compliant roof material provided/confirmed		
roof gutter detail provided inc. manufacturer – profile – effective capacity – colour		
evaporative cooler location shown if fitted (discharge to be clear of rainwater tank catchment)		
rainwater head shown		
stormwater connections shown		
downpipe to tank shown and details provided (must be to side of tank at opposite end of the UV filter system)		
rainwater tank and slab shown		
rainwater tank colour nominated		
rainwater head shown to side of tank		
stormwater connection points shown		
all rain to hot water components shown		
electrical requirements for rainwater to hot water components shown		
heat pump/hot water unit (SEW) location shown including slab		
second hot water unit and type (gas electric) shown (for drinking water)		

Solar Requirements	*Yes* if Shown on plans	Details / Comments
location of solar panels shown (2.5kW stages 1 - 4 & 3kW stage 5 - 9)		
solar panel and invertor brand / details provided - preferred suppliers bands: - Fronius, Selectronic, SolarEdge, Sonnen, SMA, Teslar		
space for solar inverter shown		
battery storage location shown on plans noting additional requirements for stage 5 onwards		
battery brand provided note sonnen for stage 5 onwards.		
electric car charging point nominated / shown		
Solar connection to head pump considered		

Envirodevelopment Reequipments	Select Relevant Option	Details / Comments
Each builder must ensure the adoption of at least 2 of the following 5 options:		
1. Use low emission paints on ≥95% of internal and external painted surfaces.		
2. Use low emission sealants on ≥95% of internal and external surfaces.		
3. Use low emission adhesives on ≥95% of internal and external surfaces.		
4. Use low emission floor coverings on ≥95% indoor-covered floors.		
5. All engineered wood products (Inc. exposed and concealed applications) are E0 - rated		
NOTE: a statement outlining how this requirement will be met need to be submitted to the DAP. The statement is to include details including product name, number and data sheet should also be provided.		**Tick if provided** ☐
All houses built within Aquarevo are encourage to use high quality, durable and sustainable materials in all dwellings including		
Structure: - Use of structural timber which is AFS or FSC accredited.		**Tick if provided** ☐
Envelope/Linings: - Use plasterboard that consists of recycled paper.		**Tick if provided** ☐
Services - PVC content sourced from an ISO 14001 certified supplier.		**Tick if provided** ☐

Other: