

Trust Taylex for Wastewater Treatment at home



Taylex

TAYLEX.COM.AU

V2.1.1 — MAY 2024



**We manufacture a range
of wastewater treatment
systems for Australian
homes to produce safe,
clean water for re-use
in your garden.**



Trust Taylex

Welcome to Taylex, an Australian family-owned company founded in 1969. We have 80 plus employees and over 90 trained wastewater specialists who market, install and service our range nationally in Australia and New Zealand. Post installation, we have a network of over 400 trained Service Technicians to provide the ongoing care and maintenance for your system.

We manufacture a range of products for Wastewater, Rainwater and Stormwater. We also offer Servicing for our wastewater systems. Taylex was the first company to manufacture Home Sewage Treatment Systems in Australia and we continue to be leaders in our field.

Expertise

With over 50 years of experience, building our reputation, Taylex is the trusted voice for the wastewater industry. We work closely with the national manufacturers association and governing bodies to lobby for more stringent wastewater regulations to ensure the highest level of treatment is met, and to provide you with the best results possible.

Integrity

We honour warranties. We stand behind our products, for their lifetime, no questions, no fine print. We are an Australian owned and made family business. We are passionate about producing quality products that work. We take care of our staff. We value the environment and human health.

Flexibility

Taylex has a system that will work for you. In difficult terrain or soil, for the size of your house and slope of your block, Taylex systems are adaptable, we are eager to work with you and become part of the solution.

Innovation

Taylex is at the cutting edge of environmentally sound wastewater treatment that is healthy for your family and the environment. We are constantly testing and improving our systems to not only provide unparalleled quality and unmatched results, but to ensure the most stringent safety standards are met. We are constantly striving to improve and perfect.

Functionality

Our Systems work! Taylex use Monolithic, single piece moulds meaning no deteriorating seals or weak post-joined walls, which could expose your family to catastrophic failure of your system. There's no skimping on parts from the biggest pump down to the smallest seal. Our systems are designed and engineered to last as long as your home.

Why Choose Taylex?

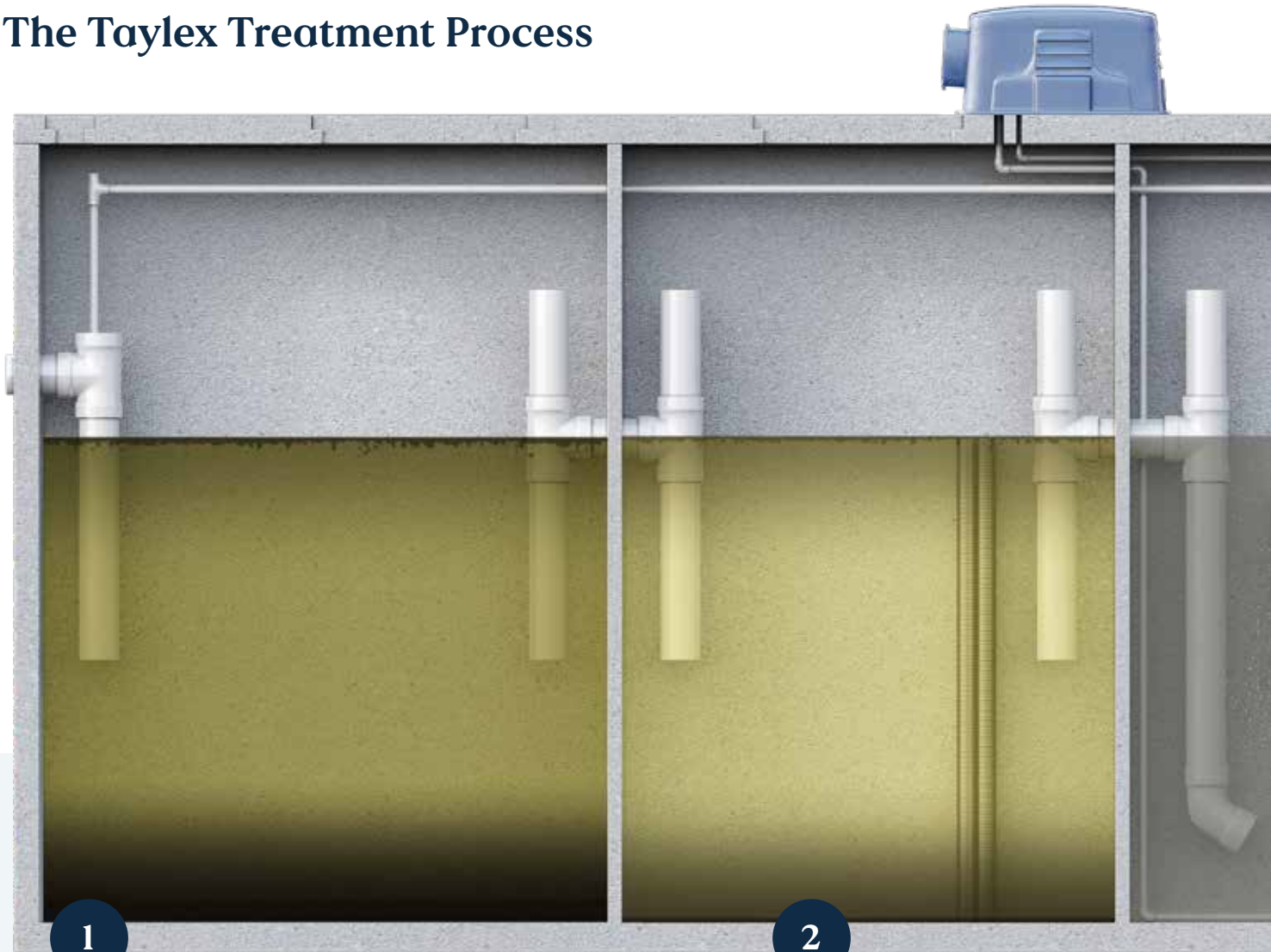


Taylex Advanced Secondary Treatment Systems act like mini municipal treatment plants. Utilising natural processes to cultivate the good bacteria that naturally occurs in your home's wastewater, to consume the organic waste and harmful bacteria.

By installing a Taylex system you will be able to reclaim your household wastewater and obtain clean, clear odourless water to irrigate your yard. The treated water that will come from your Taylex System is 65 times cleaner than septic tank effluent.



The Taylex Treatment Process



1



Primary Chamber

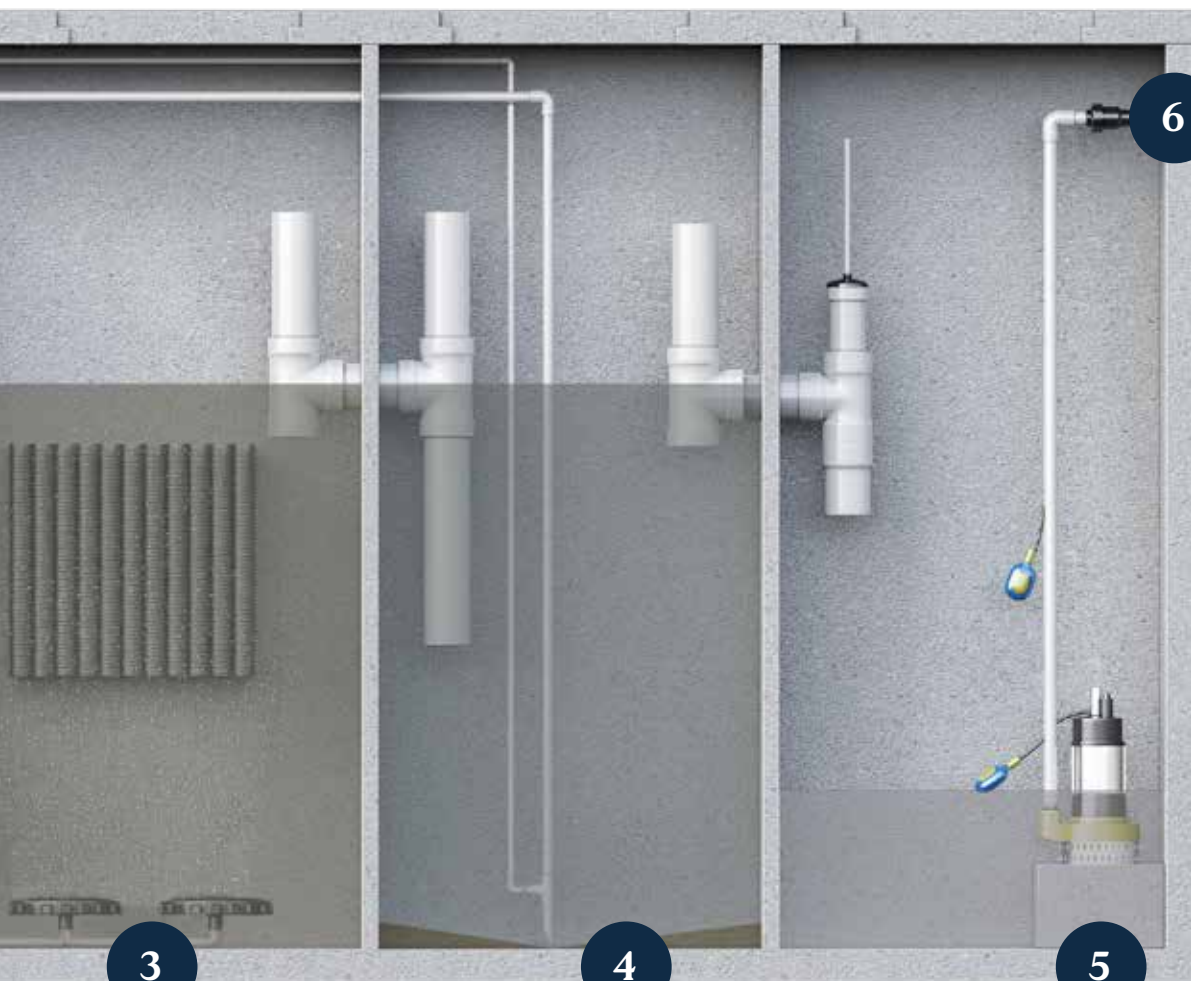
The first stop for your household wastewater is in the 'Primary Chamber'. Here solids will naturally sink to the bottom and fats and oils will naturally float to the top, leaving a clearer "Supernatant Zone" in the middle. This zone will transfer to the next stage of treatment.

2



Secondary Chamber

Next is the 'Secondary Chamber'. Further settling happens here. Again, water from the middle flows onto the next stage, there is also an additional "Bio-Mass" block in this chamber to assist with the separation of solids. In a traditional Septic System, this is where the journey would end and effluent would now be pumped onto your property and into our environment, relying on sand or soil to do the rest. With a Taylex Wastewater Treatment System, there are still four more steps to produce clean, clear, safe water for your yard.



6

Irrigation Pump

Lastly, when the Disinfection Chamber fills up, your dependable irrigation pump automatically switches on to send your water out to do its job in your yard. Crystal clear water irrigates your designated area and returns safely to nature, contributing to a healthy water cycle.

3



Aeration Chamber

The 'Aeration Chamber' is next up. This is where the magic happens. Your quiet, reliable, energy-efficient blower sends oxygen into the chamber in the form of tiny bubbles. These bubbles pass through a specially designed structure called "Bio-Mass". Bio Mass is purpose designed to trap the air bubbles to feed naturally occurring 'Aerobic bacteria'. These microscopic Eco-Warriors are now hard at work, chomping through most of the remaining organic matter, polishing the water, and eliminating odour.

4



Clarification Chamber

Step four is in the 'Clarification Chamber'. More settling occurs here. Once settled to the bottom, this potent mix of Aerobic bacteria and fine particle solids are recirculated to the Primary Chamber to keep it healthy and working hard (not smelly).

5



Disinfection Chamber

The final step in the treatment process is the 'Disinfection Chamber'. The water gets a 'kiss' goodbye from our Chlorinator which removes any harmful bacteria, viruses and pathogens. Using less chlorine per litre than your average swimming pool, the system removes any harmful bacteria, viruses and pathogens.

Emergency Storage

Taylex systems have the largest emergency storage buffers currently available on the market. In cases where surge loading events can't be avoided (like thunderstorms and power outages) your family has up to 3.9 days of storage (assuming a 1500L daily flow). That's 1,963 toilet flushes or 13 hours of shower time!






Taylex 1500 ABS systems are designed to process and treat 1,500L of wastewater.
Average wastewater generated per day:



150L / ONE PERSON



600L / FAMILY OF FOUR

	STANDARD	TALL 400	TALL 600	POLY
 Emergency Buffer Zone	3,440L	5,182L	5,890L	1,541L
 Days of Storage <small>Based on 1500L/day</small>	2.3	3.5	3.9	1
 Toilet Flushes	1,146	1,727	1,963	347
 Shower Time	7.6hr	11.5hr	13hr	2.3hr
 Washing Loads	22.9	34.5	39.2	6.9

It is important to note that where possible, Surge loading your system should be avoided as it may impact the operational efficiency of your system.

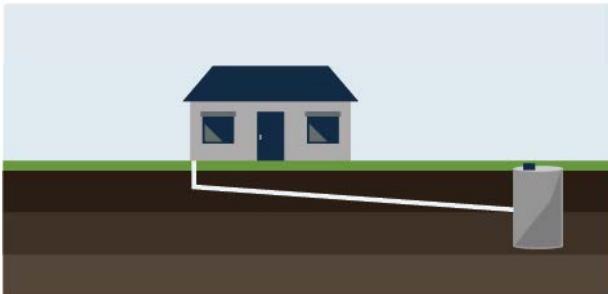
Our Range of Invert Levels

A ratio of 1:60 Fall must be met when installing any wastewater system. Factors that affect choice of invert level include, but are not limited to, size of the house, topography of the block, preferred location of the system. A riser can be added to facilitate invert when required.



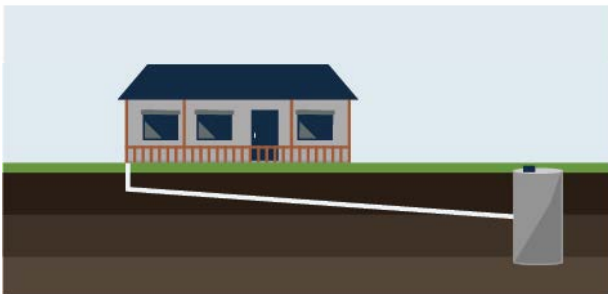
ABS STANDARD

Invert Height	670mm
Total Drainage Run	Determined by slope gradient
Depth In Ground	2,200mm
Emergency Storage	3,440Ltr (2.3 days)



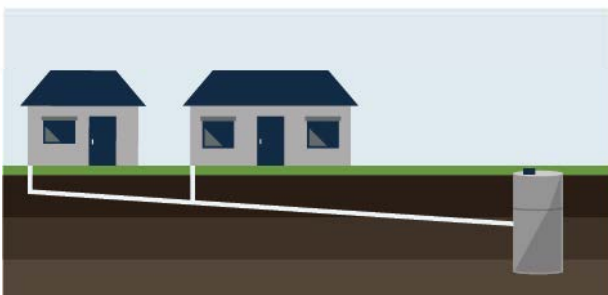
ABS TALL 400

Invert Height	1,070mm
Total Drainage Run	Up to 22m
Depth In Ground	2,600mm
Emergency Storage	5,182L (3.5 days)



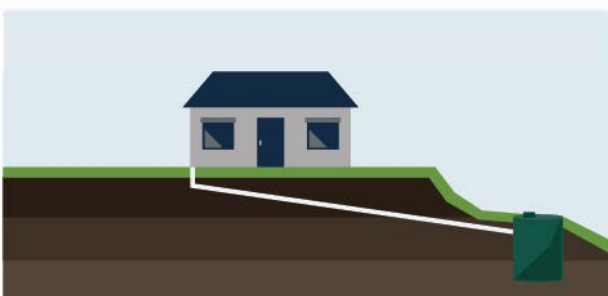
ABS TALL 600

Invert Height	1,270mm
Total Drainage Run	Up to 40m
Depth In Ground	2,800mm
Emergency Storage	5,890L (3.9 days)



ABS TALL & RISER

- Depth In Ground Invert Height = Base system dimensions + dimensions of the riser/s.
- Total Drainage Run: 35m+
- Risers have no effect on emergency storage.
- Risers available in 600 (781kg), 800 (1,040kg) and 1000mm (1,300kg).



ABS POLY

Invert Height	500mm
Total Drainage Run	Determined by slope gradient
Depth In Ground	2,200mm
Emergency Storage	1,541 L (1 day)

Concrete or Poly?

Both the Taylex concrete and polymer wastewater treatment systems are six-stage aerated wastewater treatment systems that exceed national standards and are certified in all Australian states and territories. So why have both options available if they essentially do the same thing?

Our concrete Secondary Wastewater Treatment Systems are suited to 90% of all domestic installations. Taylex Polymer Tanks are designed to accommodate site conditions where it is not possible to crane in a concrete treatment system e.g. steep terrain. Our unique polymer mould cleverly uses 'Sandwich closed-cell foam polymer' to mould the compartment walls in one piece. There are no joins or glued-in compartments and all partitions extend to the lid of the tank, so you can enjoy the same peace of mind as if you had a Taylex concrete system.



Steps to installing a Taylex System at your home

1

Design

Your builder will arrange a Wastewater Design to be completed by a certified professional to submit to Council.

2

Installation

Working together with your Builder, your new Taylex system will be the first thing to be installed on your block.

3

Commissioning

As your new home is nearing completion, Taylex will get your system up and running.

4

Servicing

Taylex Servicing provides ongoing quarterly servicing. The first 12 months is free for each new system.

Step 1

Design

In order for council to approve your Taylex Wastewater Treatment system, they will first need to know;

-Which part of your block will be irrigated by your Taylex System.

-Whether you propose to irrigate above ground (surface spray) or below ground (sub-surface).

We call this a land application area (LAA).

To gain this approval, your builder will order a Wastewater Design completed by an accredited Wastewater Designer with relevant licenses.

Note: Some councils do not allow surface spray irrigation.

In order to have the report completed, your builder will need to provide:

☐

Site Plan showing:

- Contours, if available
- Building envelope, if applicable
- Your preferred location for the Taylex treatment system tank
- Your preferred location for the irrigation area
- Future pools
- Future sheds
- Driveways
- Dams
- Children's playgrounds

☐

Floor Plans

showing bedrooms

☐

Soil Report, if available

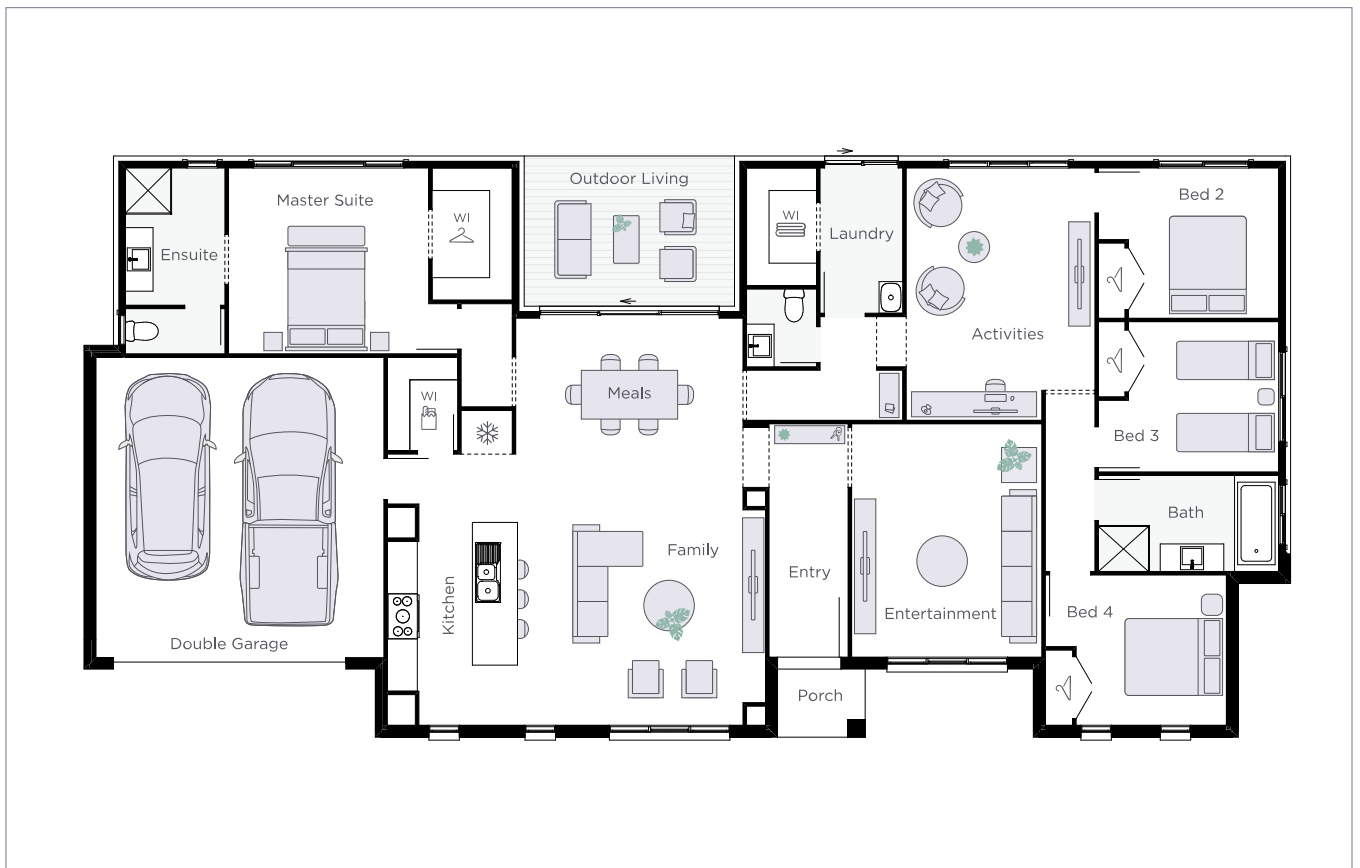
IMPORTANT NOTE:

Please discuss these requirements and your preferences with your builder prior to paying your initial deposit. If they don't have this information your system may be installed in locations that you may want to utilise for other purposes in the future.

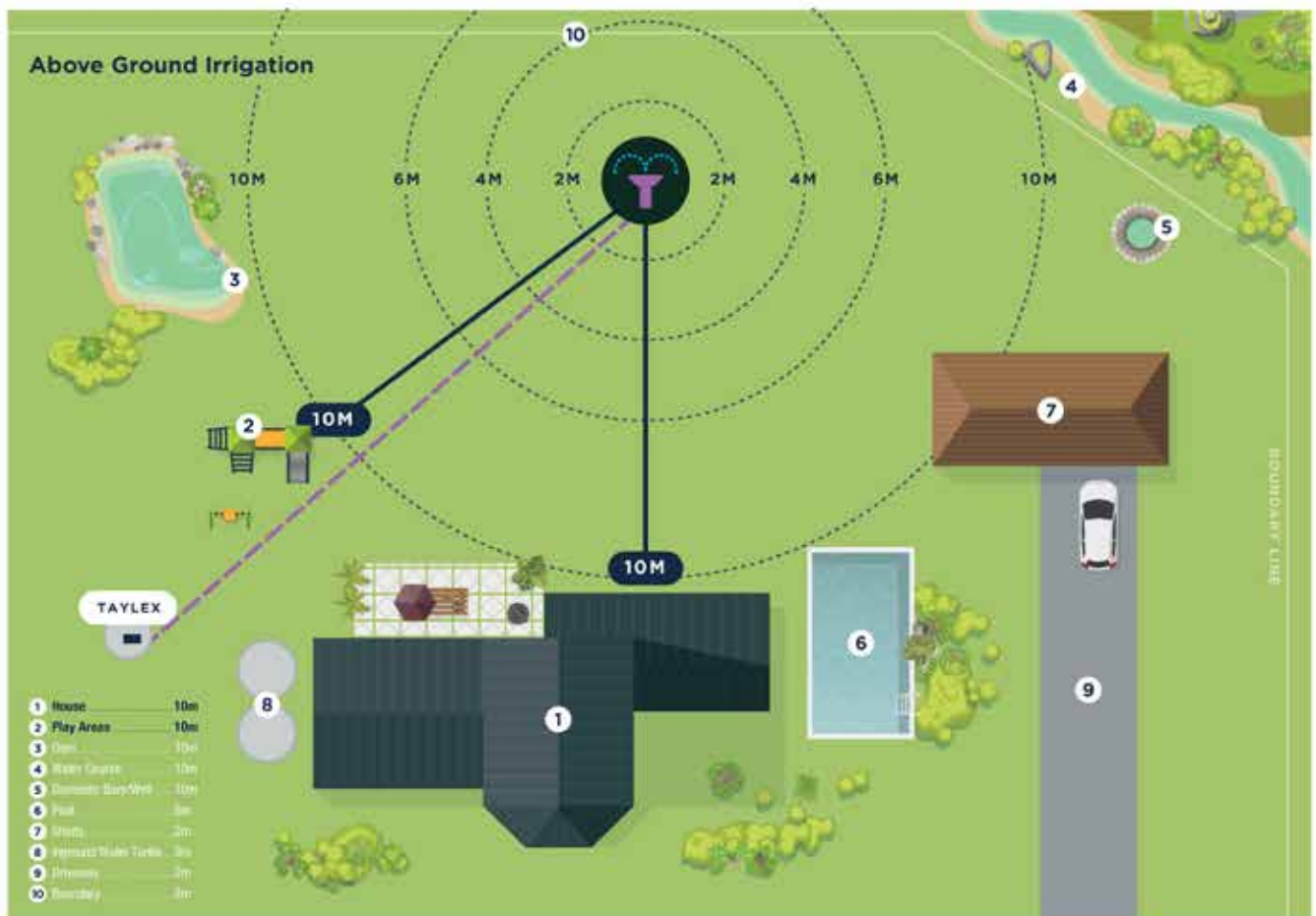
Builders Site Plan Example



Floor Plan Example



Set Back Distances



* Actual set back distances & methods vary based on council and state regulations.

SITE DETAILS
 Property Name : xxxxx
 Property Number : xxxxx
 RPO : xxxxx
 Division : xxxxx
 Parish : xxxxxx
 Area : xxxxxx

SITE SOILS
 Category Four (4) , Clay Loam Soils, Weakly Structured,
 Imperfectly Drained, Ksat : 0.12 - 0.5, DIR : 25mm/Week,
 Slope @ LAA 7% to 12%, Full / Filtered Sunlight, Light Turf Cover

CALCULATIONS
Proposed Five (5) Bedroom Dwelling
 Hence : Eight (8) Persons SEP
 Hence : 8 x 110 Litres per Person per Day = 880L/Day
 Hence : 880L/Day x 7 Days = 6160L/Week
 Hence : 6160L/Week Divide by DIR : 25mm/Week = 246

LAND APPLICATION AREA
Sub Surface Drip-Line System 250m²
Install As : Lilac 16mm Pressure Compensated UniBioline
 On 2.3µm Emitters @ 400mm Spacing (1m Apart)
DRIP-LINE ACROSS SLOPE - NON TRAFFICABLE
See Plan

H.S.T.P.
 Proposed Advanced Secondary Sewerage Treatment
 Plant : Taylex ABS (13EP) CEA : 17/2015 .

Diagram Labels:

- LAA MEASUREMENTS** (Sub Surface Drip-Line)
- EDGE OF TRENCH**
- DISTRIBUTION PIPE**
- NATURAL GROUND**
- GROUND LEVEL**
- LIGHT TURF COVER**
- DISTRIBUTION SYSTEM DEPTH 100 - 150**
- PROPOSED LILAC 16mm PRESSURE COMPENSATED UNIBIOLINE CNI 2.3µm EMITTERS @ 400mm SPACING (1m Apart) ACROSS SLOPE**
- PROPOSED FLUSH VALVE**
- PROPOSED LILAC 25mm LOW DENSITY POLY PIPE (Header to Connect Drip)**
- PROPOSED LILAC 25mm HIGH DENSITY POLY PIPE (Discharge from H.S.T.P.)**
 - Route to be Determined by Installer
- PROPOSED H.S.T.P. ADVANCED SECONDARY SEWERAGE TREATMENT PLANT : Taylex ABS (13EP) CEA : 17/2015**
 - Placement is the Responsibility of Installer to Achieve Fall
- PROPOSED FUTURE GAZEBO (Indicative Position)**
- PROPOSED FUTURE SHED (Indicative Position)**
- PROPOSED ABOVE GROUND RAINWATER TANKS (Indicative Position)**
- PROPOSED AIR VALVE**
- BUILDING ENVELOPE**
- BOUNDARY LINE**
- PROPOSED LILAC 25mm LOW DENSITY POLY PIPE (Header to Connect Drip)**
- PROPOSED DRIVEWAY**
- PROPOSED RETAINING WALL**
- PROPOSED FIVE (5) BEDROOM DWELLING**
- BOTTOM OF BANK (Indicative Position)**
- TOP OF BANK (Indicative Position)**
- PROPOSED EXAMPLE ONLY 100mm DWV PVC PIPE (Sewer)**
 - Route to be Determined by Installer

Diagram Notes:

- SLOPE @ LAA**
- PROPOSED LILAC 16mm PRESSURE COMPENSATED UNIBIOLINE CNI 2.3µm EMITTERS @ 400mm SPACING (1m Apart) ACROSS SLOPE**
- PROPOSED FLUSH VALVE**
- PROPOSED LILAC 25mm LOW DENSITY POLY PIPE (Header to Connect Drip)**
- PROPOSED LILAC 25mm HIGH DENSITY POLY PIPE (Discharge from H.S.T.P.)**
 - Route to be Determined by Installer
- PROPOSED H.S.T.P. ADVANCED SECONDARY SEWERAGE TREATMENT PLANT : Taylex ABS (13EP) CEA : 17/2015**
 - Placement is the Responsibility of Installer to Achieve Fall
- PROPOSED FUTURE GAZEBO (Indicative Position)**
- PROPOSED FUTURE SHED (Indicative Position)**
- PROPOSED ABOVE GROUND RAINWATER TANKS (Indicative Position)**
- PROPOSED AIR VALVE**
- BUILDING ENVELOPE**
- BOUNDARY LINE**
- PROPOSED LILAC 25mm LOW DENSITY POLY PIPE (Header to Connect Drip)**
- PROPOSED DRIVEWAY**
- PROPOSED RETAINING WALL**
- PROPOSED FIVE (5) BEDROOM DWELLING**
- BOTTOM OF BANK (Indicative Position)**
- TOP OF BANK (Indicative Position)**
- PROPOSED EXAMPLE ONLY 100mm DWV PVC PIPE (Sewer)**
 - Route to be Determined by Installer

BOUNDARY LINE

EXISTING SHED

EXISTING WATER TANK

EXISTING THREE (3) BEDROOM DWELLING

EXISTING GARAGE

EXISTING BLACK WATER TANK TO BE DECOMMISSIONED

EXISTING DRIVEWAY AREA

EXISTING GREASE TRAP

EDGE OF GARDEN (Approx)

EXISTING GREY WATER TANK TO BE DECOMMISSIONED

PROPOSED DISCHARGE PIPE FROM HOLDING TANK (Indicative Position)
- Route to be Determined by Installer

PROPOSED 5000L PRE-TANK (Holding Tank) - Placement is the Responsibility of the Installer to Achieve Fall

PROPOSED H.S.T.P. TAYLEX ABS SECONDARY ADVANCED SEWERAGE TREATMENT PLANT (13EP) CEA 17/2015
- Placement is the Responsibility of the Installer to Achieve Fall

PROPOSED LILAC 25mm HIGH DENSITY POLY PIPE (Discharge from Indexing Valve)

PROPOSED LILAC 32mm HIGH DENSITY POLY PIPE (Discharge from H.S.T.P.)
- Route to be Determined by Installer

PROPOSED LILAC QCV VALVE

PROPOSED LILAC 19mm SULLIAGE HOSE (Hose Length 6.25m + 0.5m Plume - Radius)

PROPOSED TWO (2) PORT INDEXING VALVE

PROPOSED LAND APPLICATION AREA
= Surface Spray QCV Valve System 572m²

PROPOSED LILAC DOME SPRINKLER

19/25mm LILAC HOSE AND HIGH DENSITY POLY PIPE
60mm x 19/25mm LILAC DENSITY PIPE
19/25mm LILAC DENSITY PIPE
25/125mm HIGH DENSITY POLY PIPE WITH 1" (25mm) THREADED INLET

LILAC DOME SPRINKLER WITH 1m DIAMETER SPRAY

WATERING SCHED
RELATIVE HUMIDITY (AFTER RAINFALL) 40% - 60%

60mm x 19/25mm LILAC DENSITY PIPE

25/125mm HIGH DENSITY POLY PIPE WITH 1" (25mm) THREADED INLET

13.5m

6.75m

LAA MEASUREMENTS

SLOPE
5% - 7%
@ LAA

5000L PRE-TANK

PROPOSED 100mm DWV PVC PIPE (Sewer)
- Route to be Determined by Installer

SITE DETAILS
Property Name : xxxxx
Property Number : xxxxx
RPD : xxxxx
Division : xxxxx
Parish : xxxxx
Area : xxxxx

SITE SOILS
Category Four (4), Clay Loam Soils, Moderately Structured, Imperfectly Drained, Ksat : 0.97 (tested), Slope @ LAA 5% - 7%, Full / Filtered Sunlight, Open Space Available, LAA Requires Turf or Seeding

CALCULATIONS
(A) Existing Three (3) Bedroom Dwelling
Hence : Four (4) Persons
Hence : 5 x 115L per Person per Day = 575L/Day
Hence : 575L/Day x 7 Days = 4025L/Week (Total)
(B) Proposed Bed + Breakfast Accommodation 3 Bedrooms
Hence : Allow Six (6) Persons (6BP)
Hence : 6 x 115L per Person per Day = 690L/Day
Hence : 690L/Day x 7 Days = 4830L/Week
(C) Future Function Centre - Staff (Non Residential) + Visitors (Non Residential) Total 40 Persons Max
Hence : 40 x 30L per Person per Day = 1200L/Day
Hence : 1200L/Day x 4 Days = 4800L/Week
Total Calculations : = 4025L/Week + 4830L/Week + 4800L/Week = 13,655L/Week (Total)
Hence : 13,655L/Week Divide by DSR : 25mm/Week = 546

LAND APPLICATION AREA
Surface Spray QCV Valve System 572m²
Install As : Four (4) QCV Valve System
Install As : Hose Length 6.25m + 0.5m Plume - Radius
Install As : Two (2) Port Indexing Valve Required See Plan

H.S.T.P.
Proposed Taylex ABS Secondary Advanced Sewerage Treatment Plant (13EP) CEA 17/2015 = 5000L Holding Pre Tank

Step 2

Installation

Due to the size and complexity of our installations, when combining both a large crane truck and excavator, builders prefer to install all Taylex systems prior to any construction work being done on site.

Once your builder has completed your site earthworks and marked out the house (set out), we are then able to locate the position of your tank(s) and complete the mark out process.

It is a requirement that all Wastewater Treatment Systems and irrigation areas are installed by a licensed Plumber, Drainer or someone that has completed the required training, and holds a current license.

Your builder will manage all aspects of your Treatment System and/or Rainwater Tank installation ensuring only qualified tradespeople are engaged to undertake the work.

Pre-Installation, your builder will supply:

- ☐ Signed Contract.
- ☐ Complete and Signed Service Contract.
- ☐ Confirmation of client contact information, for future servicing purposes.
- ☐ Plumbing Compliance Permit and Council Stamped Wastewater Report.
- ☐ Final Construction Plans showing your Taylex System location and Rainwater tank locations (if applicable).

Secondary Wastewater Treatment System Tank Ground Mark out



Rainwater Tank Ground Mark out



Step 3

Commissioning

Once the installation is complete, and you are close to the end of your build, it's now time to commission your Taylex Wastewater Treatment System.

Commissioning means that we will get your system up, running and ready to use. If not already completed we will also install your irrigation. This will either be sub surface or surface irrigation depending on your local council / state requirements.

Your builder will manage all aspects of commissioning so that all you need to do is move in!

Typical Surface Irrigation



Typical Sub-Surface Irrigation



Step 4

Servicing

While we're commissioning your system, we'll also conduct your first official service. Welcome to Taylex Servicing!

Taylex include the first 12 months of servicing with each new system. All Taylex home sewage treatments systems are required to be serviced quarterly. Your local council will enforce these requirements. Systems may only be serviced by licensed wastewater service personnel.

Taylex Servicing will:

- ✓ Ensure that all council reporting requirements are met.
- ✓ Send your service reports to your local council on your behalf.
- ✓ Send your reports and invoices to you electronically (when possible).
- ✓ Provide spare parts to current contract holders at a discounted rate.
- ✓ Offer an extended warranty of 3 years for electrical and mechanical parts if you hold a current service contract and the parts were installed by us. Standard warranty is 12 months.
- ✓ In the unlikely event of a breakdown or emergency, we prioritise call outs for our current customers and charge at a discounted rate.

Taylex

TRUSTED
SINCE



1969

WASTEWATER
SERVICING
STORMWATER
RAINWATER

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1300 TAYLEX

QBCC LIC. 15237404

Taylex

WASTEWATER SERVICING



Ongoing care of your Taylex Treatment System

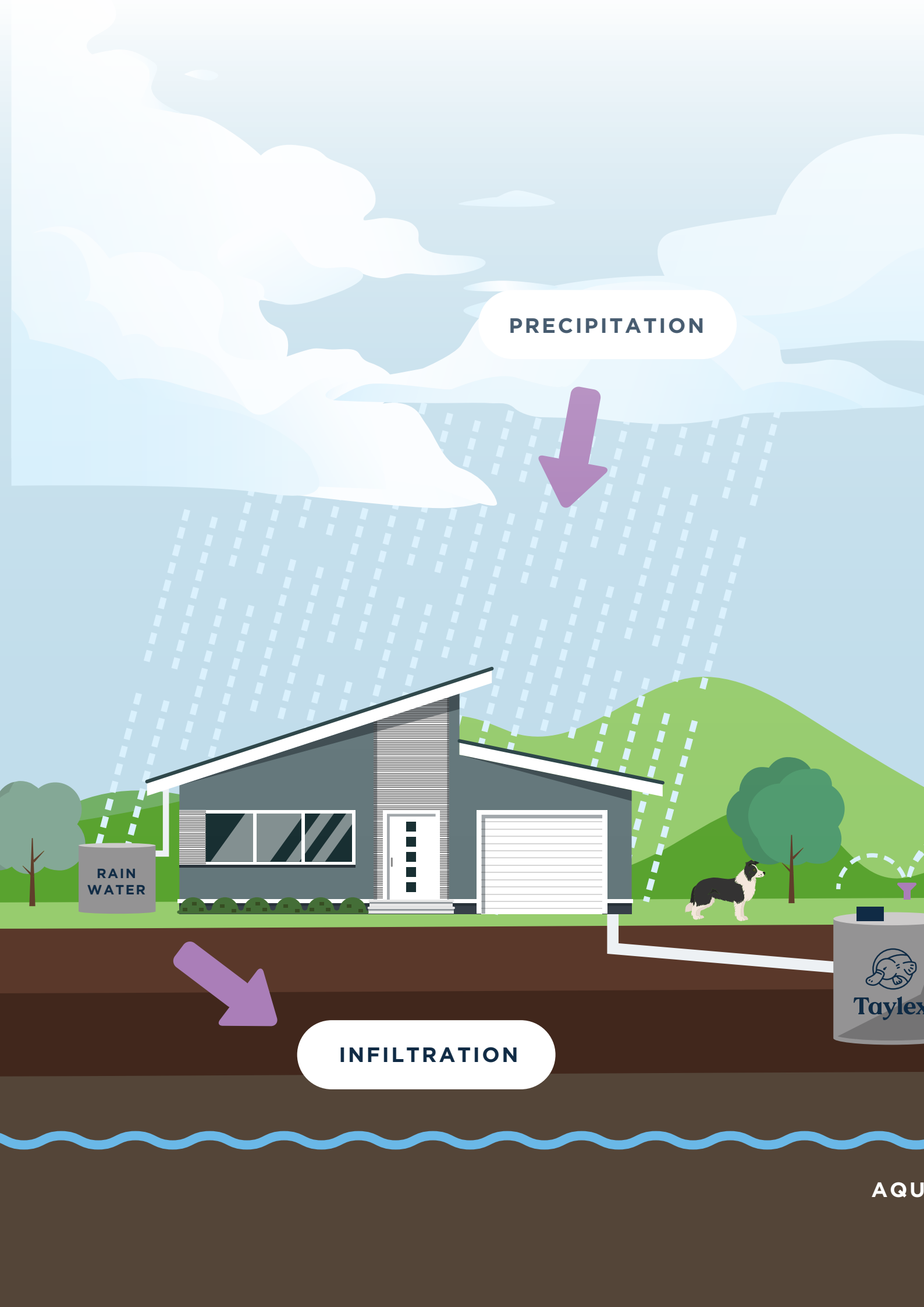
- ✓ Always maintain a clear area around the tank
- ✓ Maintain a clean irrigation filter (if fitted). Your service agent will discuss this with you to make sure you're up to speed with how and when to do this.
- ✓ Keep your owner's manual handy for quick and simple troubleshooting, of course you can always give us a phone or send an email with any questions.
- ✓ Please avoid covering lids with decks, structures, soil, gravel, concrete, pavers, pot plants, barbecues, swing sets, seats etc.
- ✓ Please don't obstruct access to the system or the service openings.
- ✓ Avoid pooling water around your system, especially during heavy rain events.
- ✓ Never turn off the power, unless instructed to do so by your Taylex Accredited Service Agent.

Please refer to the **Taylex Owner's Manual** for advice on cleaning products that are good for your system and other helpful tips for keeping your system healthy.





PRECIPITATION

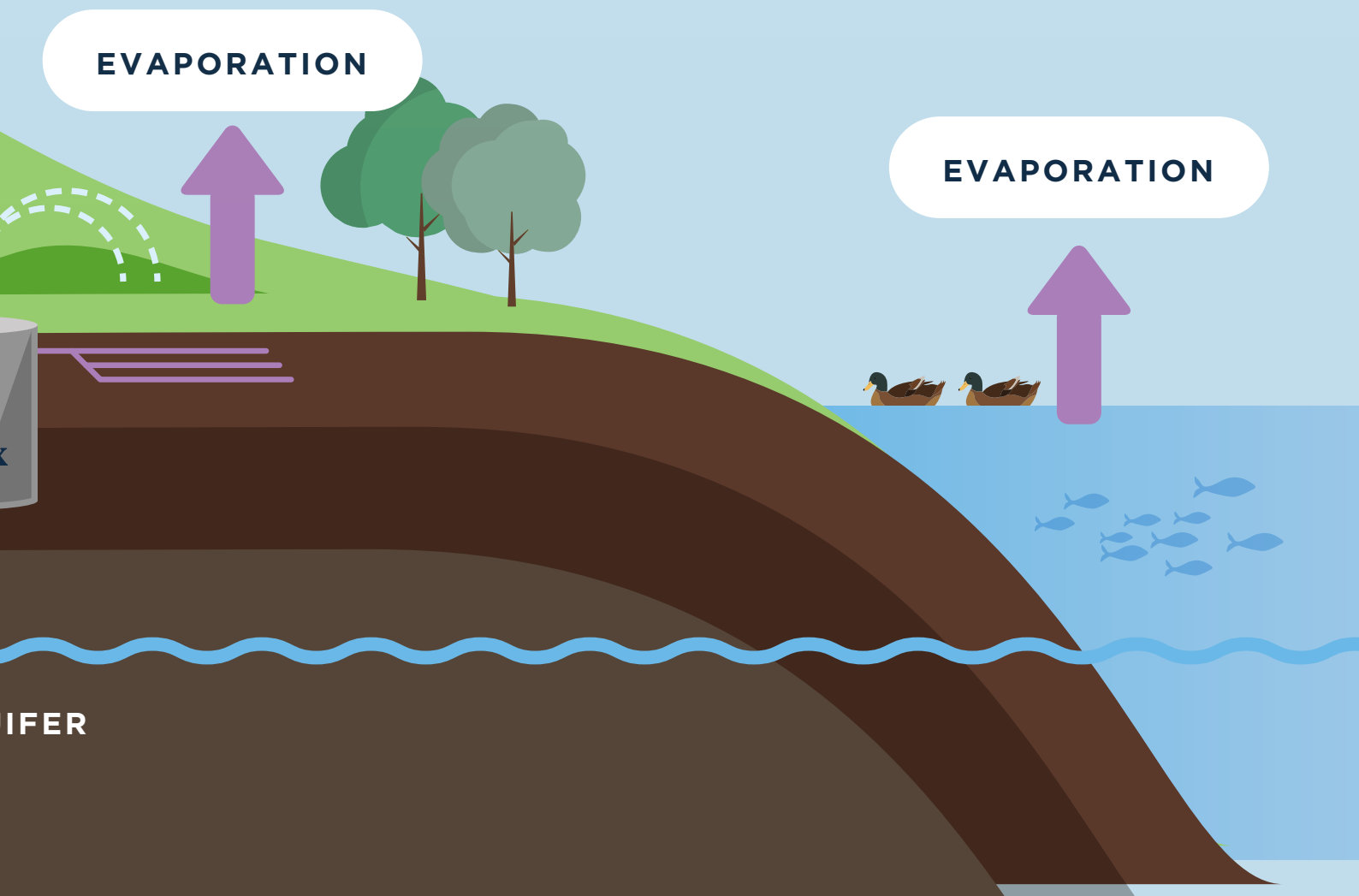


INFILTRATION

AQU

Taylex, part of your sustainable home.

Taylex Advanced Systems turn household wastewater into safe, clear water to irrigate your yard, contributing to a healthy water cycle.



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