



**Waste treatment for spaghetti factory.**

Based on your information, we have configured an Aquarius O-2NR 1.8KL P Commercial ATU to service the spaghetti factory (toilets showers and hand washbasins only ... No trade waste from commercial kitchen and or washdowns)

Our hydraulic loading calculation, based on information supplied by you, is as follows:

User Type	Number of Person	L/person/day	Total
Factory Staff	10	70	700
Admin Staff	4	30	120
Sales staff	6	30	180
<b>Total</b>			<b>1,000 L/day</b>
System Size - Recommendation			1,800L (1.8KL)

ATU

Supply an Aquarius O-2NR 1.8KL P Com ATU

The system is nutrient retentive and is capable of treating 1,800L per day. The tanks are configured in plastic with non-trafficable gastight lids and comes with dual discharge standby duty pumps and control panel (drawing attached).

System has a *standard Invert Level 650-850mm*. This can be extended to a maximum invert of 1450mm with risers. Should a deeper invert be required a price revision would be necessary.

DISPOSAL OPTION (supply of components only)

Assuming Loamy Clay Soil with a Design Loading Rate (DLR) of 20mm/day.

AqwaCell16 Flatbed Leach Drain

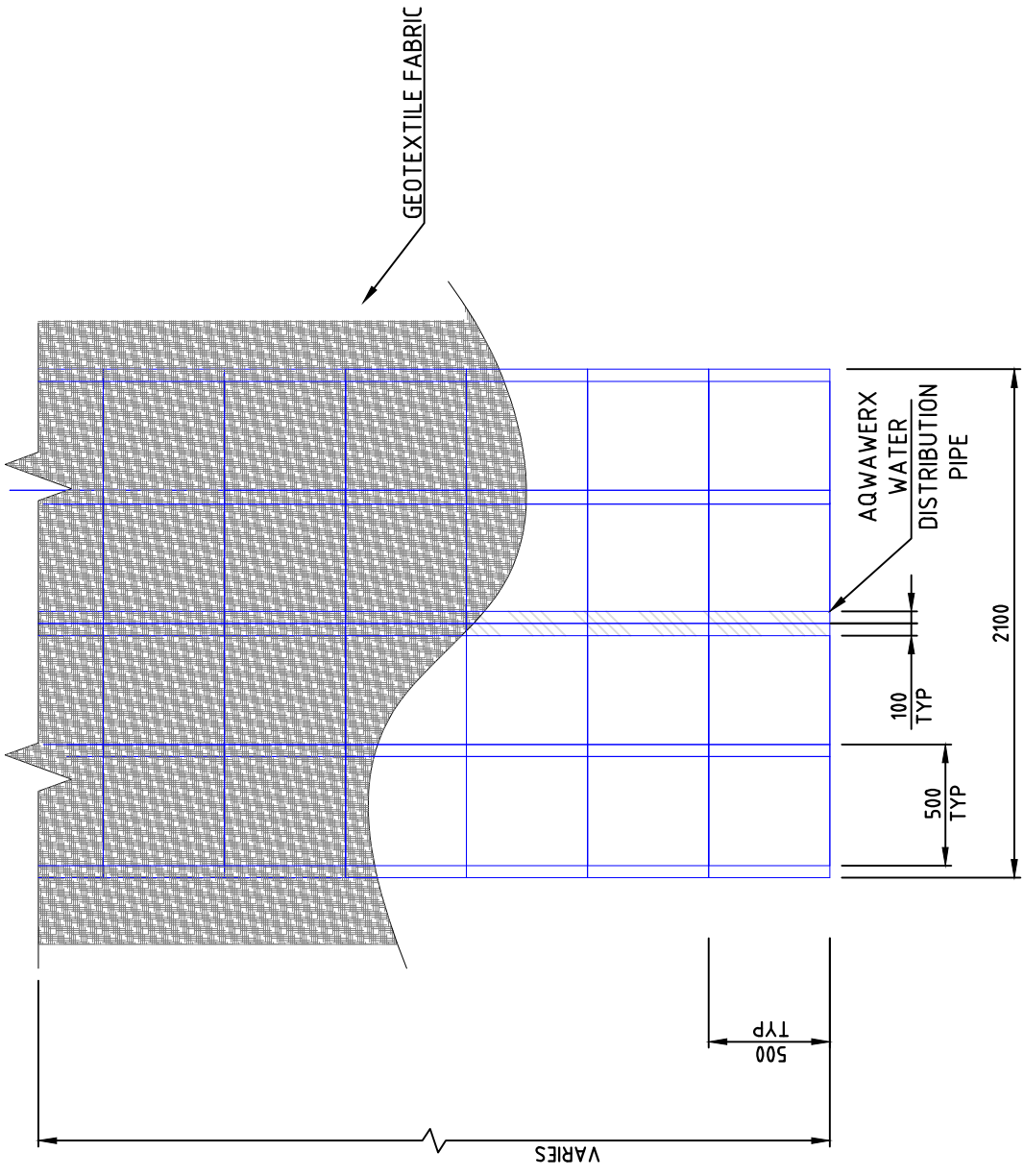
(Hydraulic Loading)  $1,000 \div 20 \div 2 = 25m$

Recommend a configuration of 2 drains x 12,5m long x 2.1m wide each.

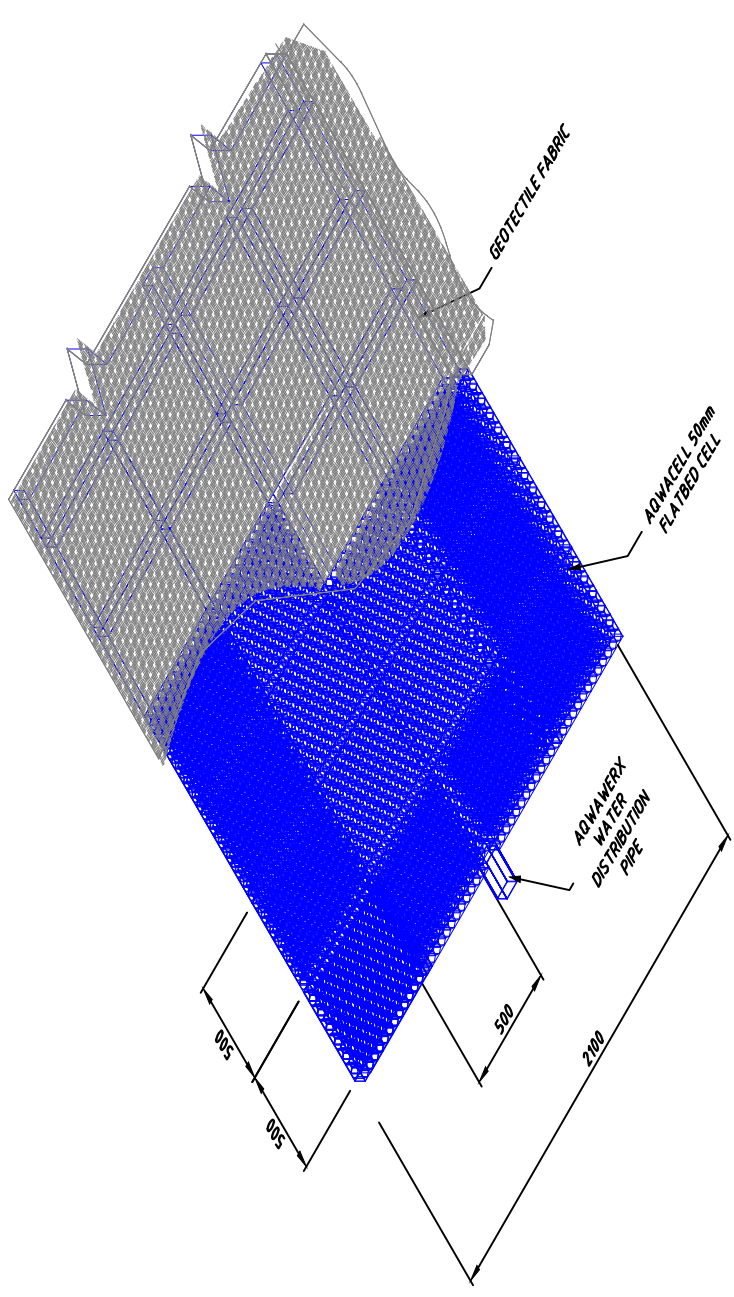
*Drains are 2.1m wide and requires 1.8m separation between each bed.*

All of the above is subject to Local Government and DoH approval.

- Supply of an Aquarius ATU in plastic tanks suitable for installation in a non-trafficable area; as well as any associated pumps, control panels and fittings as shown on drawing. Prices are based on an invert level of the sewer drains entering the Primary Tank of the ATU to be 650-850mm FGL. If the invert level is deeper a revised budget quote may be needed.
- Supply of Flatbed Leach Drains with an automatic diversion valve.
- Clean sand to put underneath the Flatbed Drains should they be fully inverted (i.e. installed on a 600mm sand pad above natural ground level)

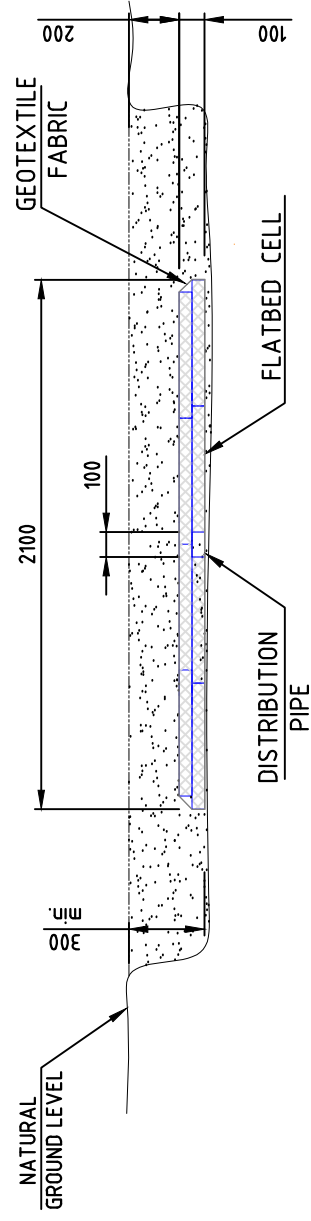


AQWACELL FLATBED CELL UNITS  
PLAN VIEW  
SCALE 1:30



TYPICAL AQWACELL FLATBED CELL ARRANGEMENT  
SCALE 1:30

NOTE: CELLS ARE TO BE FULLY COVERED WITH GEOTEXTILE FABRIC ON INSTALLATION.



AQWACELL FLATBED CELL UNITS  
SECTIONAL VIEW  
SCALE 1:30

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TITLE: Aquacell16 Flatbed Leach Drain	
SCALE: See on dwg	CHECKED: MB
DATE: 01/09/2021	SHEET: 1 OF 1
DRAWN: S.H	SIZE: A3
DRAWING NO: AWS-AQWACELL16-FLD	

All measurements are in millimeters unless specified otherwise

Rev.	Description	Date

# AQUARIUS® O-2 NR 1.8KL ATU

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 Aquarius and shall not be copied, retained  
 or otherwise used without approval.

**ELEVATION** | Duralen Plastic Tanks | 2 x 2700 Carat Tank with baffles | Dual Discharge

**Tank Capacities (L):**  
 Primary Chamber : 2400  
 Secondary/Aeration Chamber: 875  
 Clarifying Chamber : 650  
 Discharge Chamber : 875  
 Discharge Volume: 170

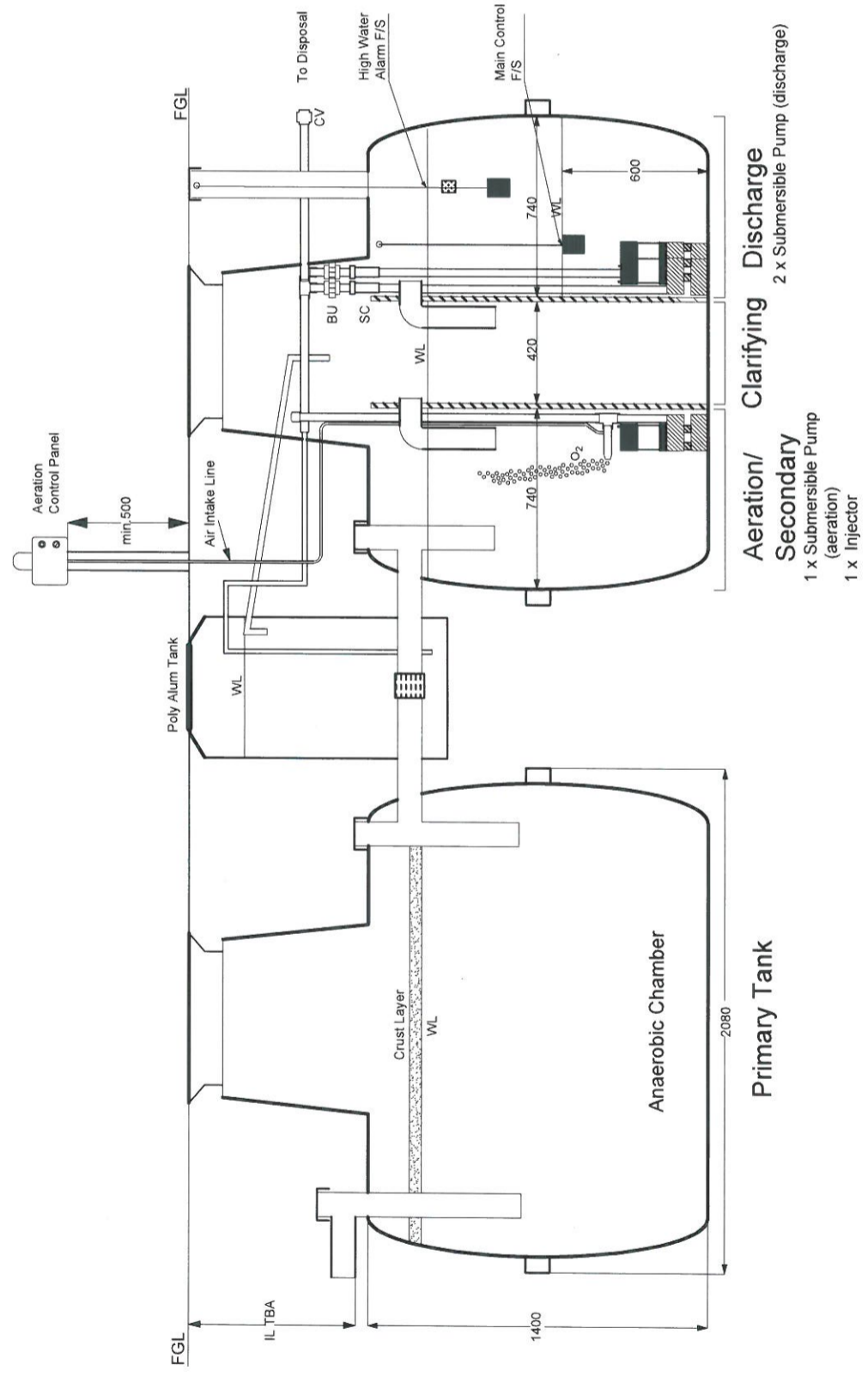
**Effluent Quality Performance Criteria:**

**Parameters & Specification**  
 Total Suspended Solids: <30mg/L  
 Biological Oxygen Demand: <20mg/L  
 pH: 6 - 8

**Structural integrity: 15 years (tanks)**  
**Serviceability min 15 years**  
 System complies with AS/NZS  
 1547:2012 & 1546.3

**Treatment Performance:**

**Maximum: 1800 Litres per day**  
**Minimum: 180 Litres per day**



<b>CERTIFICATION</b>	FOOTPRINT		AQUARIUS® O-2 NR 1.8KL ATU
	3m	5m	DRAWN: NB
PROCESS ENGINEER: Olaf Stams, State Qualified Technician ATST Kiel Germany Environmental Technology/Process Engineering	Depth: 1590mm + IL		CHECKED:
DATE: 16.01.2018	SIGNATURE:		SCALE: NTS
			DATE: 16.01.2018
			All measurements are in millimetres unless specified otherwise