



BIKE WASH

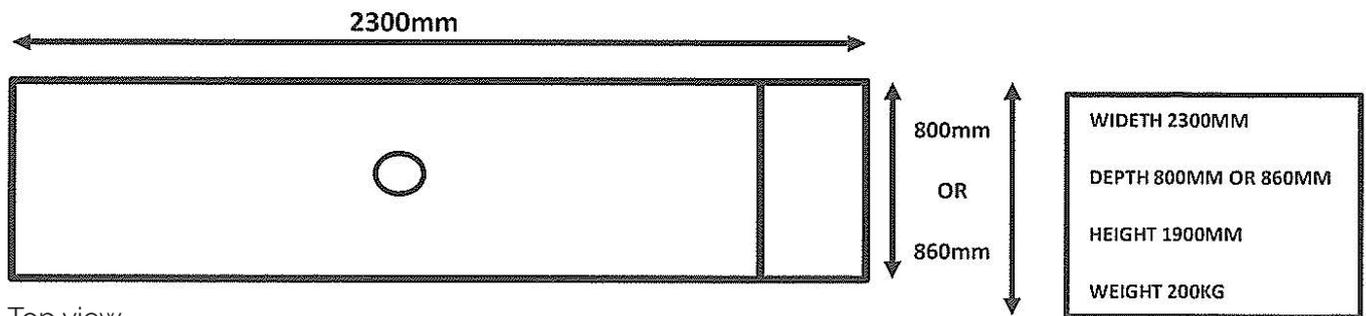
Layout Information and Specifications

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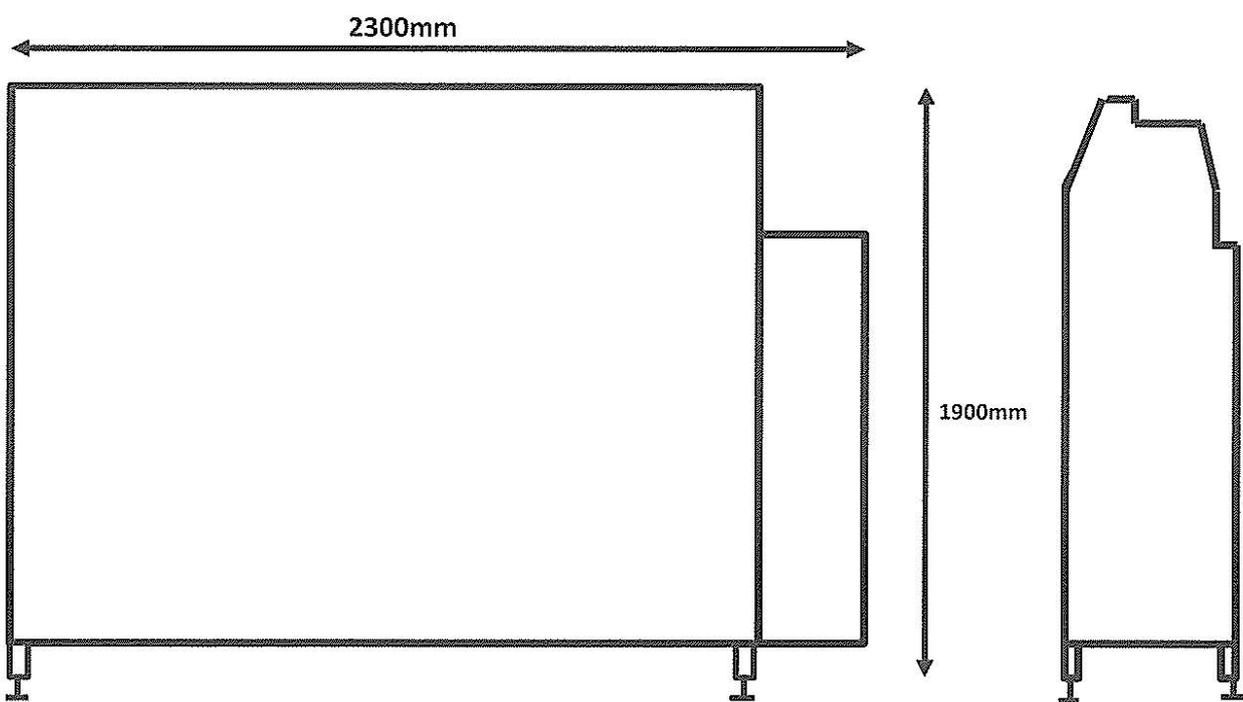
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1 Specifications and Technical Requirements

1.1 Specifications



Top view



Front view

Side view

POWER 220-240V, 40 AMP SINGLE PHASE CIRCUIT (Hard Wired) with 32 AMP MAXIMUM LOAD

WATER Cold Water inlet min 40PSI (50PSI Optimum), ½ inch Ball Valve

WASTE 50 mm Diameter Outlet

2 System Specifications

SYSTEM WITH ONBOARD HOT WATER UNIT		
Power Instant Hot Water	220-240V	32 Single Phase Circuit (Hard Wired)
WATER Inlet Pressure (Min) 40psi / 275kpa	Cold	½" Ball valve
WATER Inlet Pressure (Max) 60psi / 413kpa	Cold	½" Ball valve
COLD WATER Inlet temperature	Minimum	5 Degrees Celsius
	Maximum	36 Degrees Celsius
Factory Set water temperature	50 Degrees Celsius at wash gun	
WATER Maximum Operating Pressure 140-150psi / 965-1034kpa	Factory set	
FILTRATION	Primary	Stainless steel mesh filter
	Secondary	SPS DBA Stainless bucket trap WaterMark Level 2 WMTS 040:2016
Solvent & Oil Interceptor	100 Litre Solvent & Oil Interceptor (Contact your local water authority trade waste division)	
Back Flow Prevention Device	Connections to be protected by a "high hazard" backflow prevention device. i.e. "RPZ" or Registered "Air-GAP" Recommended Watts 009M3-AUS RP 15 or 20mm AS2845.1 Lic WMKA1335 (May be required contact your local water authority)	
WASTE	50mm DIA Outlet as well as, a minor trade waste application to be made to the local water regulator (Contact your local water authority trade waste division)	

DIMENSIONS / WEIGHT	
Dimensions	Length 2300mm / Height 1900mm / *Depth 800mm or 860mm *Note: model dependent
Weight	200kg

APPROVALS	
*Risk assessment performed by IAPMO (NATA accredited laboratory)	
CE conformity with the following European Union Directives: EMC Directive 2004/108/EC & Low Voltage Directive 2006/95/EC	
IEC 61000-6-3:2006 Electromagnetic compatibility (EMC) – Part 6.3: Generic standards – Emission standard for residential, commercial and light-industrial environments	
AS/NZS 60335.2.75:2005 + Admt 2009 in relation to vending machines AS 60204.1:2005 'Safety of machinery – Electrical equipment of machines, General Requirements'	
IEC 61000-6-1: 2005 Electromagnetic compatibility (EMC) Generic standards. Immunity for residential, commercial and light-industrial environments.	
*ATS 5200.101:2005 – Strength of Assembly	
EPA Registered Noise tested rating of 66dba @ 4 meters	

USAGES	
Water usage: 3.5 litres per minute (20-30 litres per single bike wash)	
Average power usage per wash cycle is .76kwh	

*Note: Approvals pending.

3 Waste

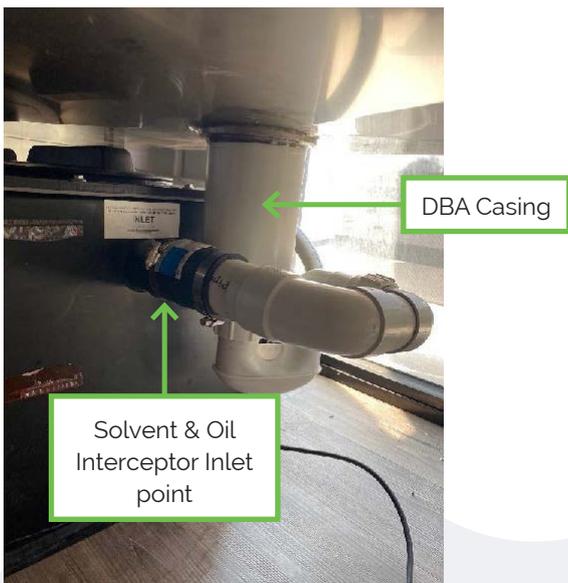
3.1 Waste to Sewerage

The waste to sewerage outlet on the Bike Wash Interceptor is 50mm, you will need to plumb from there to your sewerage point.

The picture on the left shows the interceptor 50mm outlet position on the unit while the picture on the right shows how the site has plumbed the waste from the interceptor.

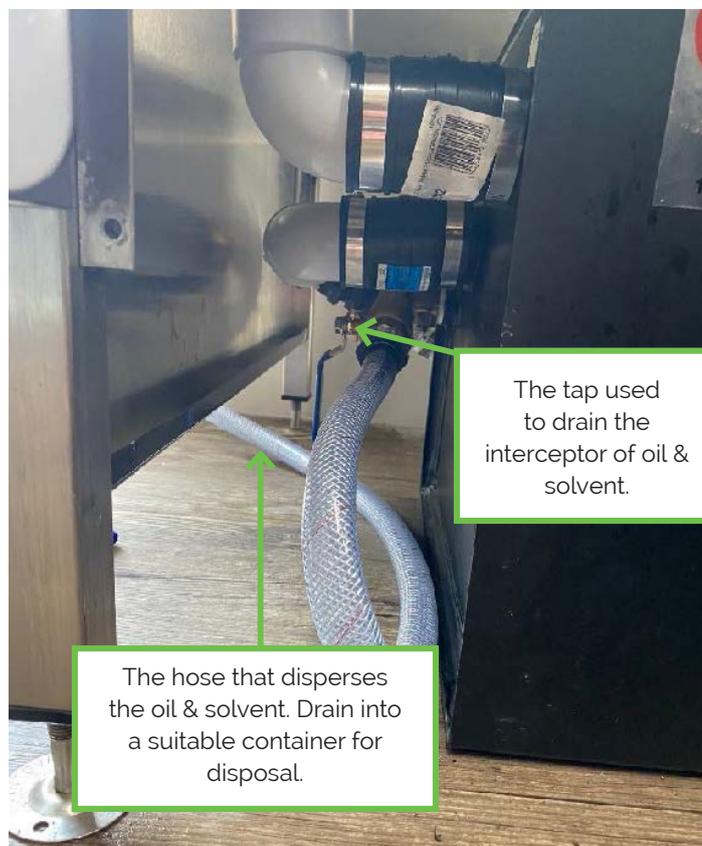


While the below picture shows the entrance point from the Bike Wash DBA (filtration system) to the Solvent & Oil Interceptor.



3.2 Waste Solvent & Oil Interceptor

As bikes may have solvents and oils removed when being washed the Bike Wash comes standard with a Solvent & Oil Interceptor. The below picture shows the unit along with the oil and solvent tap and drainage hose.



4 Hot Water

Each Bike Wash comes fitted with an instantaneous hot water unit. Below is a picture of the Bike Wash Stiebel Eltron 6/50 electric instantaneous hot water unit, it is fitted to the back of the cabinet.



5 Product Dosing Pump

Each Bike Wash comes with an Iwaki EJ dosing pump to mix the cleaning agent with water. The pump is located on the top shelf of the cabinet and has a recommended dosing rate of 200 SPM (Strokes per minute).



6 Pressure Pump

Each Bike Wash comes fitted with a medium pressure 230 v pump with a maximum 150PSI to protect the bikes being washed from damage.



7 Dryer

Each Bike Wash comes with a fully fitted 2x1100 dryer. It does not require any action as part of the installation process and is located on the bottom shelf of the cabinet.



8 Back Flow Prevention Device

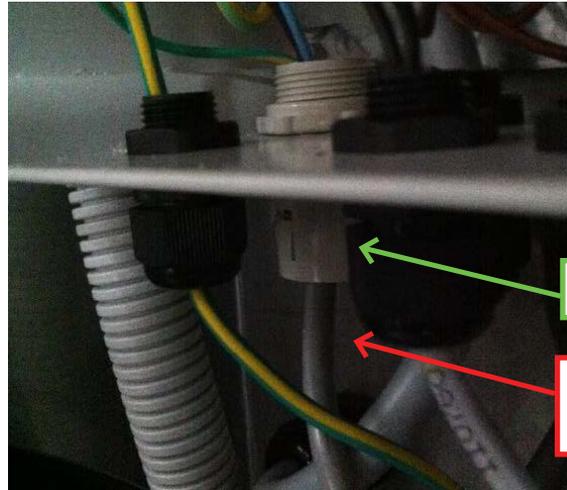
Connections need to be protected by a "high hazard" backflow prevention device. The below picture highlights the use of a reduce pressure backflow preventer ("RPZ"). Refer to appendix 8.1, Plumbing Schematic Individual Protection drawing.



9 Electrical Installation of the Unit

The below picture is the main electrical cable inside the cabinet. It enters through the gland underneath the bike wash close to the ground. Run the power cable in 25mm flexible conduit as there is a socket already installed in the bottom of the main circuit breaker box shown. Leave 1m in length after you have reached the bottom gland.

If a new power point/source is being installed for the bike wash it needs to be below 370mm from the floor as the back of the bike wash fits flush with the wall.



The above picture shows the main electrical cable entry point into the bike wash. Once you have run the cable and conduit to this point, leave another 1000mm for the termination inside the cabinet.

Bike Wash Unit	Current Protection	Max Current
Standard with Instantaneous Hot Water	40 AMP	32 AMP

10 Fact Sheet

Fact Sheet

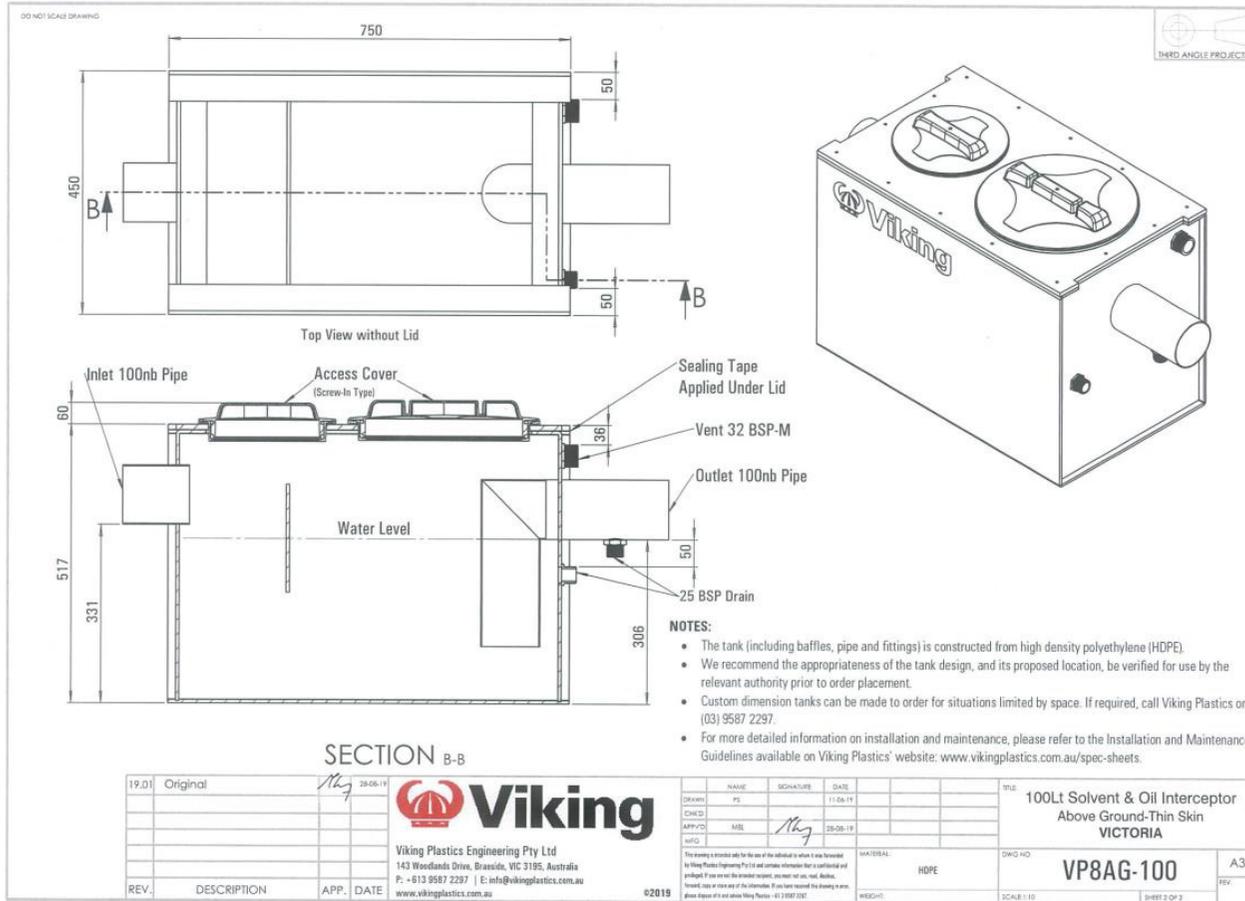
- Unit connects to existing services
 - Cold Water*
 - 50mm Sewer Waste**
 - 240-volt, 40-amp power supply
- Instantaneous electrical Hot Water unit.
- Water usage: 3.5 litres per minute (20-30ltrs per wash)
- Length 2300mm / Height 1900mm / Depth 800mm or 860mm dependent on model
- Weight 200kg
- Standard wash charge is recommended to be between \$8 & \$10, for 10 minutes of wash time (minimum start-up)
- Cost to wash each bike is approximately 60 cents to 90 cents (Power, Soap & Water)
- Average power usage per wash cycle is .76 kwh

***Note:** Connections to existing hot/cold water to be protected by a "high hazard" backflow prevention device. i.e. "RPZ" or Registered "Air-Gap"

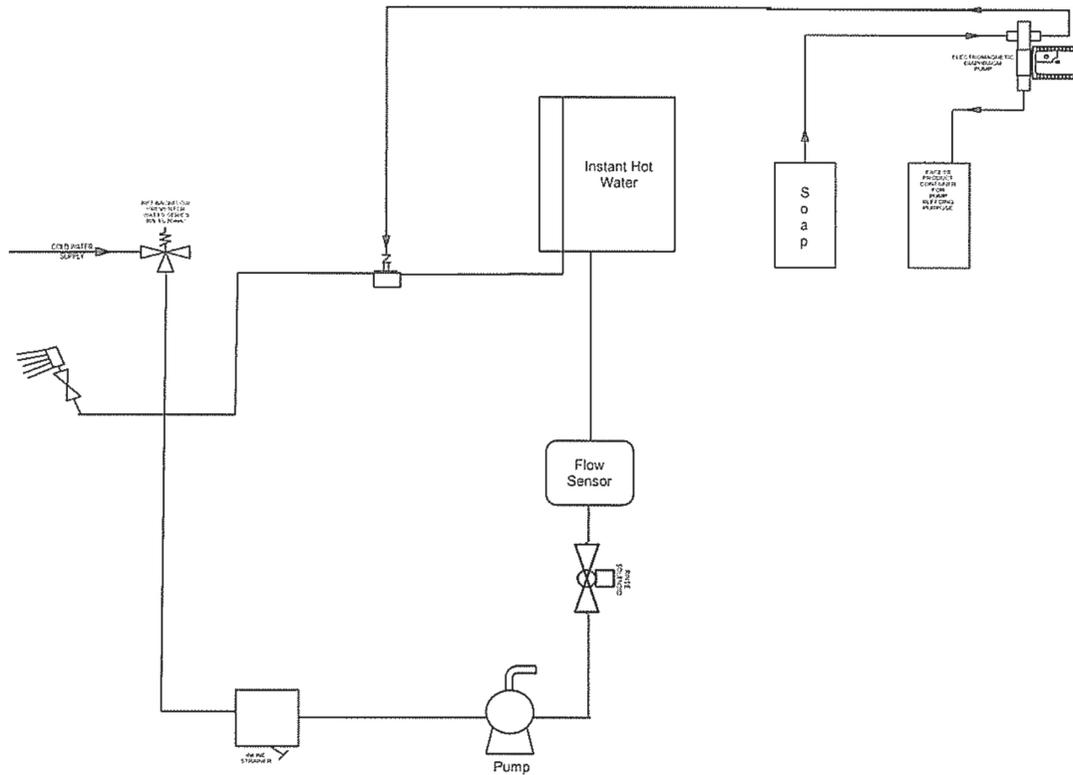
****Note:** A minor trade waste application is to be made to the local water regulator (Contact your local water authority trade waste division)

11 Appendices

11.1 100 Litre Solvent & Oil Interceptor

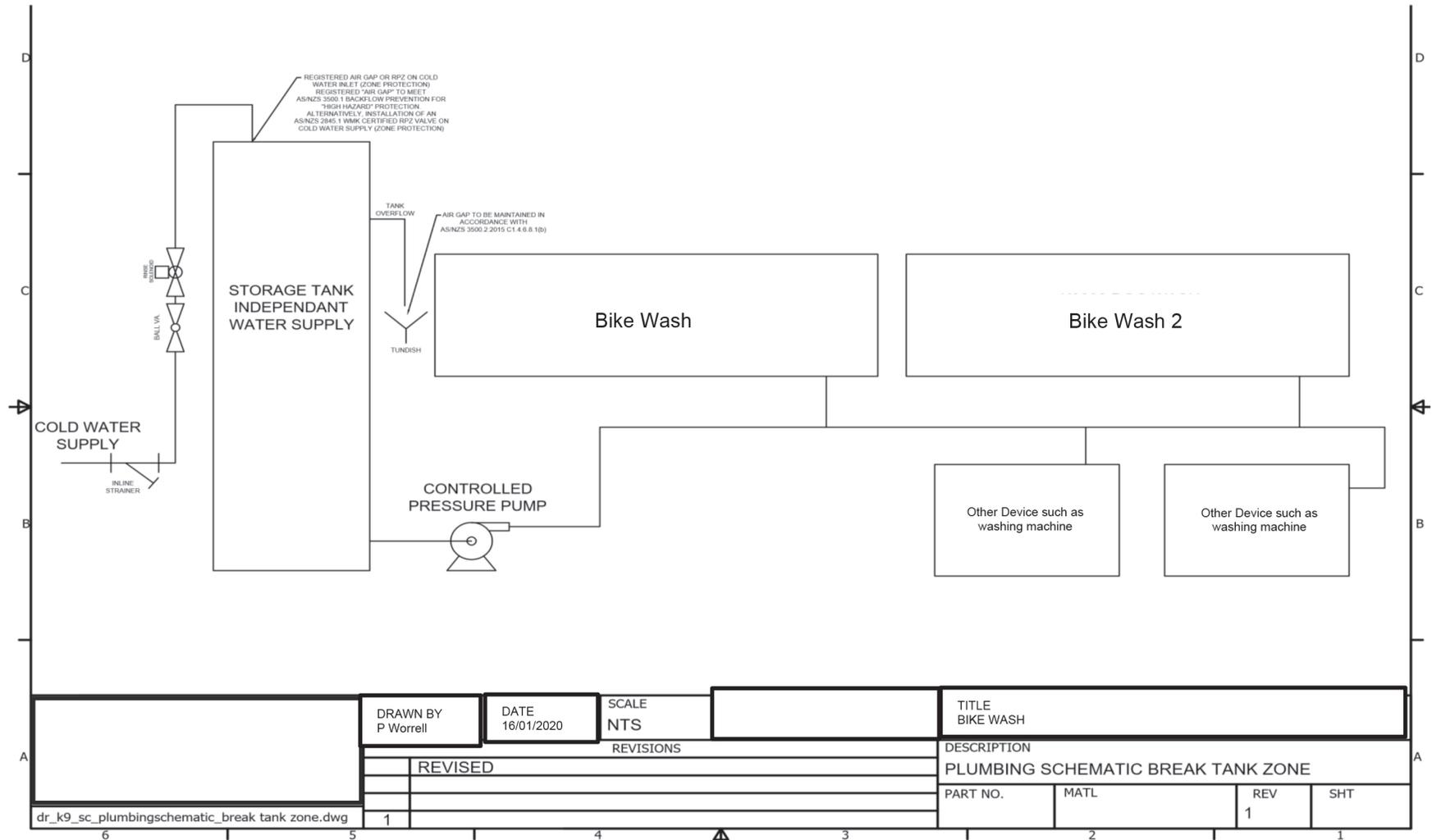


11.2 Plumbing Schematic Individual Protection



A	DRAWN BY P Worrell	DATE 16/01/2020	SCALE NTS	TITLE BIKE WASH				A	
	REVISIONS				DESCRIPTION				
	1 REVISIED				PLUMBING SCHEMATIC INDIVIDUAL PROTECTION				
	PART NO.	MATL	REV	SHT					
1						1			

11.3 Plumbing Schematic Break Tank Zone



11.4 Plumbing Schematic Zone Protection

