



K9000® 2.0

Technical Layout Specs



All requests and enquiries regarding the use of, and availability of this manual are to be directed to:

Furever Clean Dog Wash Inc.

1654 Brousson Drive

Victoria BC V8N 5M9

Canada

Tel: 250-2179433

Email: info@fureverclean.ca

Website: www.fureverclean.ca

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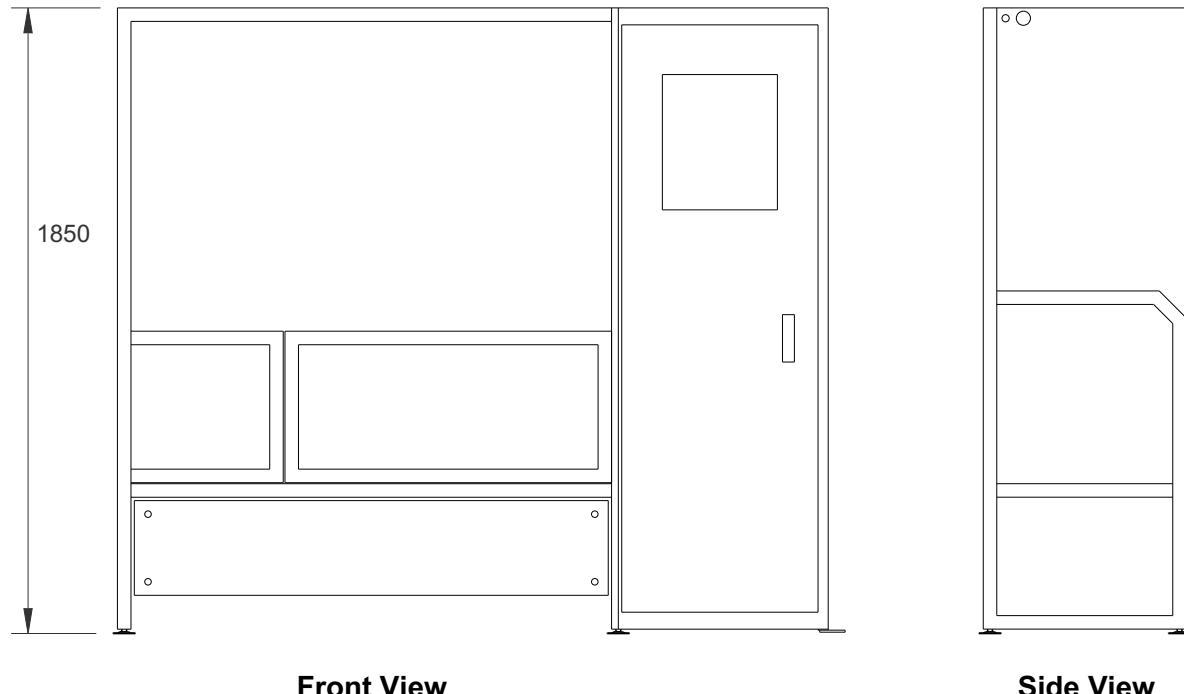
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1 K9000 2.0 System Specifications

SYSTEM WITHOUT ON BOARD HOT WATER UNIT				
Power	208/240V	16 AMP (10 AMP max load)		
WATER Inlet Pressure (Min) 40psi / 275kpa	Hot	½" Ball valve		
	Cold	½" Ball valve		
WATER Inlet Pressure (Max) 72psi / 500kpa	Hot	½" Ball valve		
	Cold	½" Ball valve		
COLD WATER Inlet temperature	Minimum	5 Degrees Celsius		
	Maximum	30 Degrees Celsius		
HOT WATER Inlet temperature	Minimum	55 Degrees Celsius		
	Maximum	65 Degrees Celsius		
Factory Set water temperature	35 Degrees Celsius at wash gun			
WATER Maximum Operating Pressure 50psi / 350kpa	Factory set via water regulator			
FILTRATION	Primary	Stainless steel mesh filter		
	Secondary	Vinidex DBA Lic. No. WMKA20071		
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			
WASTE	2" DIA Outlet as well as, a minor trade waste application to be made to the local water regulator (As per local requirements)			
SYSTEM WITH ON BOARD HOT WATER UNIT				
Power Instant Hot Water	208/240V	16 AMP (10 AMP max load) for dog wash as well as External (<i>dependent upon inlet water temperature and # of dog wash units to be installed</i>)		
Power Hot Water Storage Tank	208/240V	40 AMP (32 AMP max load)		
WATER Inlet Pressure (Min) 40psi / 275kpa	Cold	½" Ball valve		
	72psi / 500kpa	½" Ball valve		
COLD WATER Inlet temperature	Minimum	0 Degrees Celsius		
	Maximum	30 Degrees Celsius		
Factory Set water temperature	32-34 Degrees Celsius at wash gun			
WATER Maximum Operating Pressure 50psi / 350kpa	Factory set via water regulator			
FILTRATION	Primary	Stainless steel mesh filter		
	Secondary	Vinidex DBA Lic. No. WMKA20071		
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			
WASTE	2" DIA Outlet as well as, a minor trade waste application to be made to the local water regulator (As per local requirements)			
Tundish	Required for hot water relief pipe (storage tank system only)			
DIMENSIONS / WEIGHT				
Dimensions	Length 2150mm / Height 1850mm / Depth 600mm			
Weight	K9000 2.0 - 285kg			
APPROVALS				
CSA Approved – Each machine is CSA inspected and labelled				
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: Average 10 litres per minute (2.64 GPM) or 50 litres per wash (5 minutes)				
Average power usage per wash cycle is .76kwh (dependent on hot water source)				

2 Specification Drawings & Plans

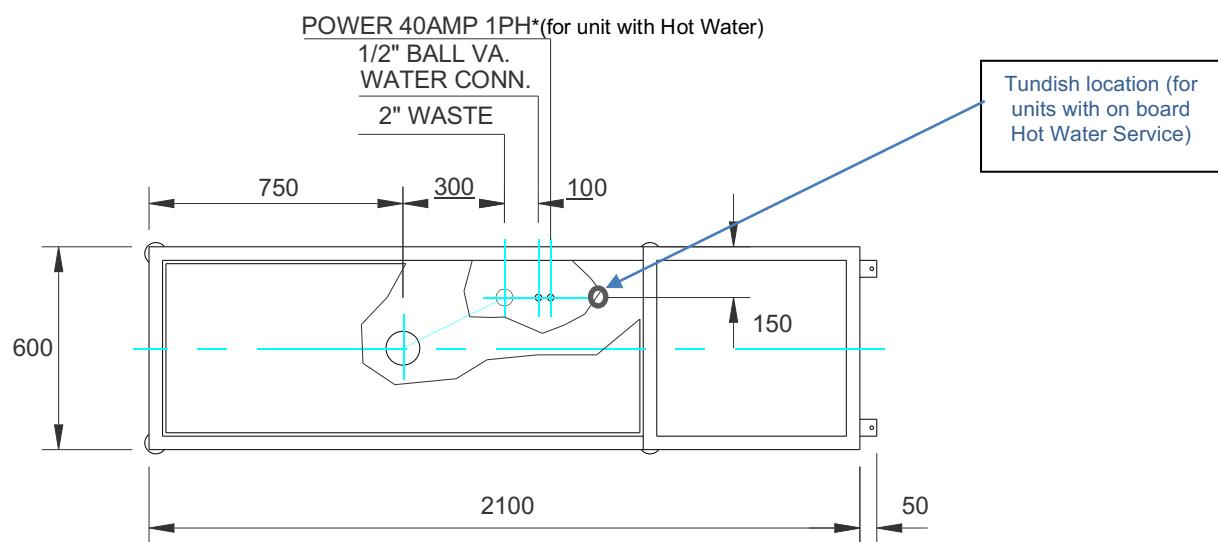
2.1 Specifications

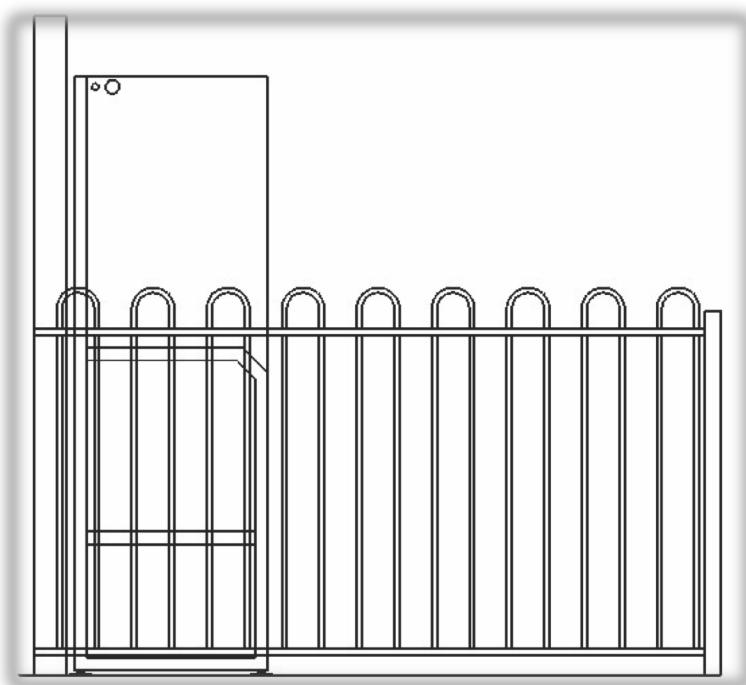
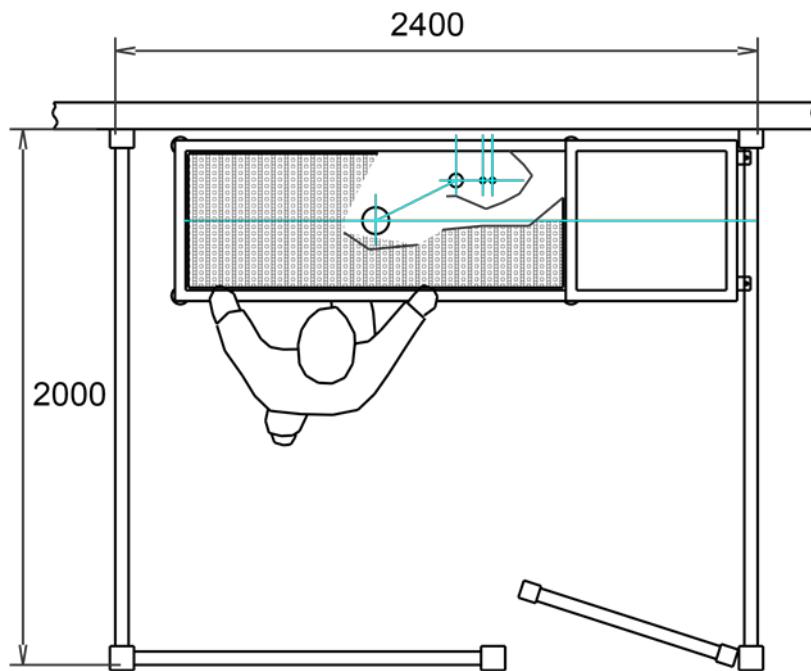


Front View

Side View

2.2 Plan





3 Waste

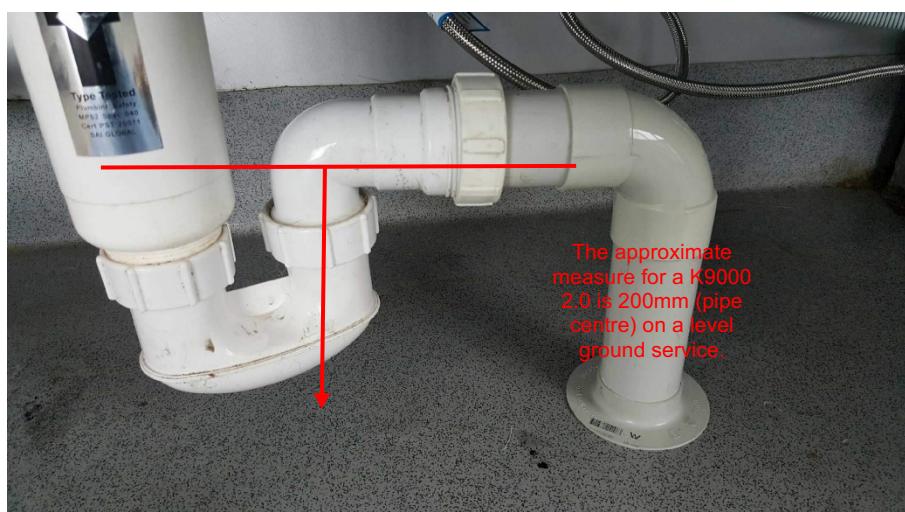
3.1 Existing Sites

Shown below is a K9000 2.0 that has been installed into an existing room. The 2" inch connection points were run through the back wall to the existing waste point. Other possibilities are to run the 2" inch connection points along the walls to an existing waste point.



3.2 New Sites

Shown below is a K9000 2.0 that has been installed at a new site where the site has allowed for the waste point as part of construction. Note, new sites may also utilize external waste points, and run the connection through or along the wall.



4 Hot Water

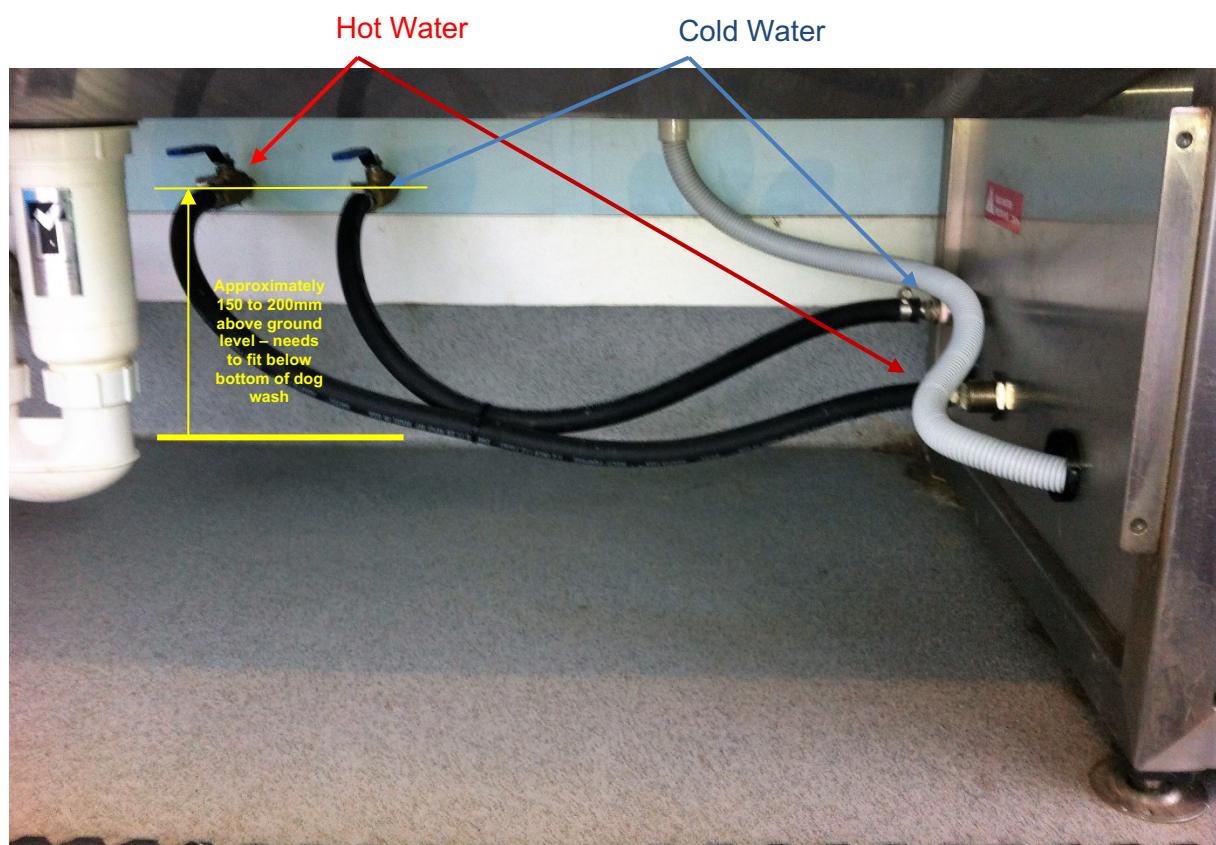
Hot water can be sourced from the site or the dog wash can include an on board hot water service.

Important Should you choose not to have an onboard hot water system, it is strongly recommended a dedicated hot water system be used as your existing hot water system may or may not be suitable for the dog wash. Furever Clean Dog Wash are only too happy to consult with you in assessing your current hot water system to ensure the dog wash will operate at its maximum efficiency.

4.1 Site Supplied Hot Water

Shown below is a K9000 2.0 that was installed at a site that supplied HOT water, and as such the unit did not require to have an on-board hot water service.

**Please consult with Furever Clean Dog Wash to ensure your existing hot water supply is adequate.*



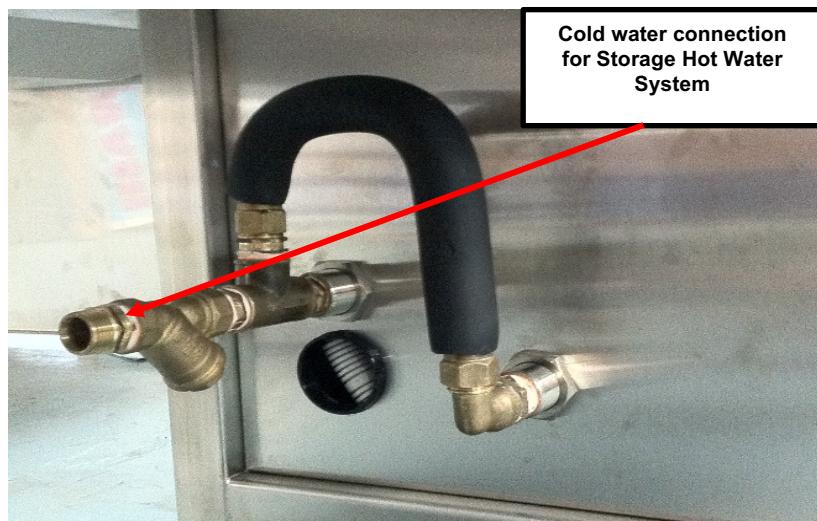
4.1.1.1 On Board Hot Water Storage Unit

Shown below is a K9000 with an on-board hot water storage service.

**Please consult with Furever Clean Dog Wash to ensure what type of hot water system best suites your site as there are many variables to consider.*



Shown picture below shows the water entry point for a K9000 2.0 with a hot water storage service.



4.1.1.2 On Board Instantaneous Hot Water Unit

The pictures below are examples of instantaneous hot water units which may be fitted either on the left-hand side of the cabinet or on the rear of the dog wash cabinet.

**Please consult with Furever Clean Dog Wash to ensure what type of hot water system best suites your site as there are many variables to consider.*



Only qualified personnel should access the on-board hot water unit as there is "live" equipment inside.

The instantaneous water heater heats the water while it is flowing through the unit.

To adjust the water temperature, use the tempering valve.

Shown picture below shows the water entry point for a K9000 2.0 with an instantaneous hot water service.



Cold water connection
for Instantaneous Hot
Water system

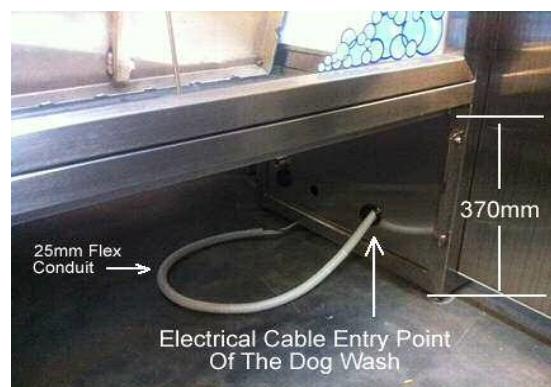
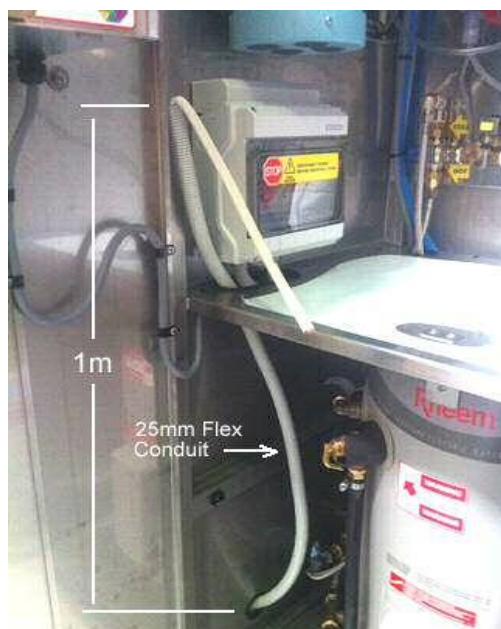
5 Back Flow Prevention Device

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 diagram.



6 Electrical Installation of the Unit

The below picture is the main electrical cable inside the cabinet. It enters through the gland underneath the dog 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.



The above picture shows the main electrical cable entry point into the dog wash. Once you have run the cable and conduit to this point, leave another 900mm for the termination inside the cabinet.

	Current Protection	Max Current
Dog Wash Unit	16 AMP	10 AMP
Dog Wash Unit with Storage Hot Water Service	40 AMP	32 AMP <i>May vary for larger elements, discuss with Furever Clean</i>
Dog Wash Unit with Instantaneous Hot Water System	<i>Dependent upon inlet water temperature and # of dog wash units to be installed, discuss with Furever Clean</i>	

7 Fact Sheet

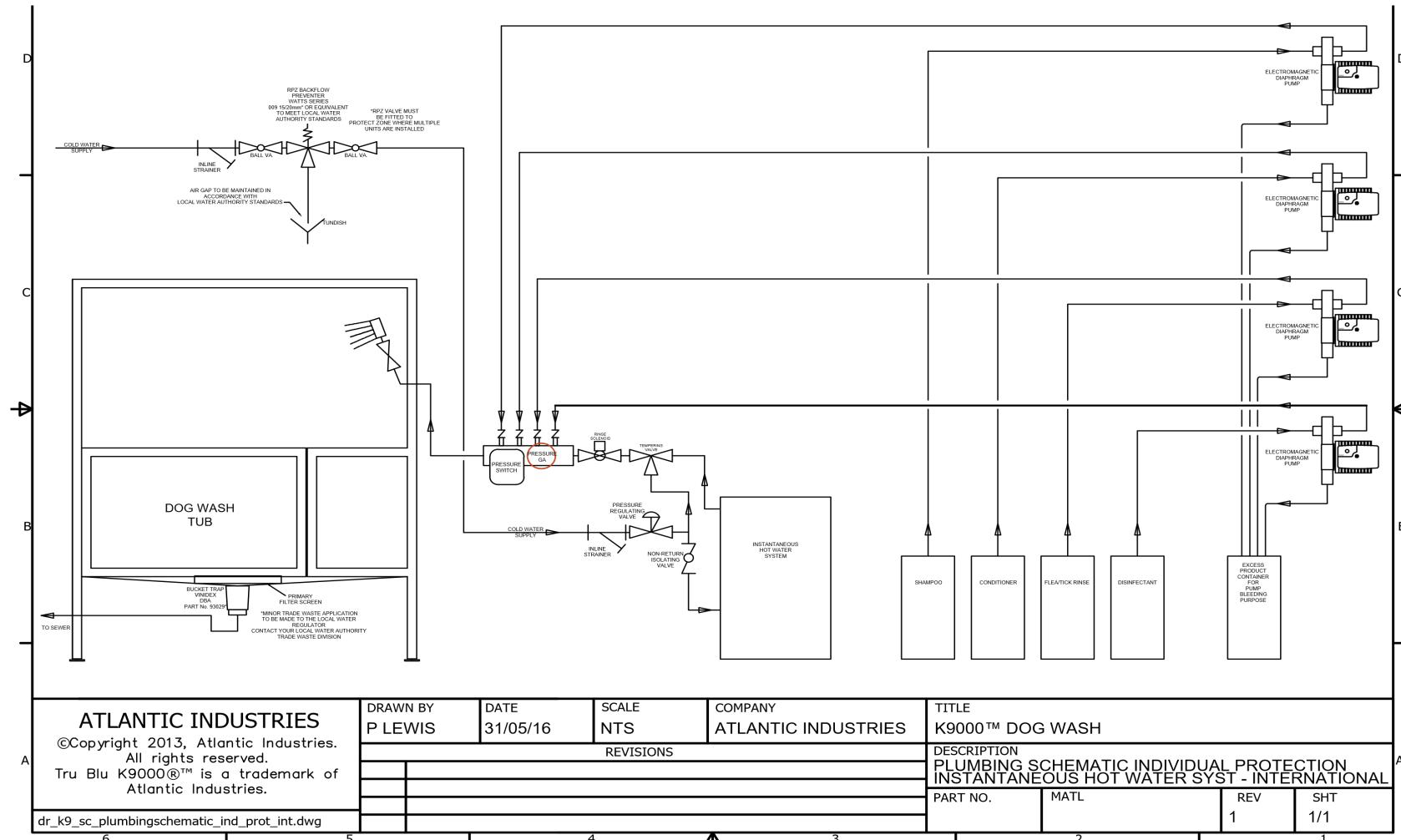
- Unit connects to existing services
 - Hot/Cold Water*
 - 2" Sewer Waste**
 - 208-240v, 16-amp power supply
 - Size of onboard Hot water heater will depend on voltage and inlet water temperature.
- A Hot Water unit is optional, and can be fitted if required.
- Water usage average 10 litres per minute or 50 litres per wash (5 minutes)
- Length 2150mm / Height 1850mm / Depth 600mm
- Weight of K9000 2.0 is 285kg
- Standard wash charge is recommended to be between \$10 & \$12, for 10 minutes of wash time (minimum start-up)
- Cost to wash each dog is approximately \$1.25-\$1.50
- 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”*

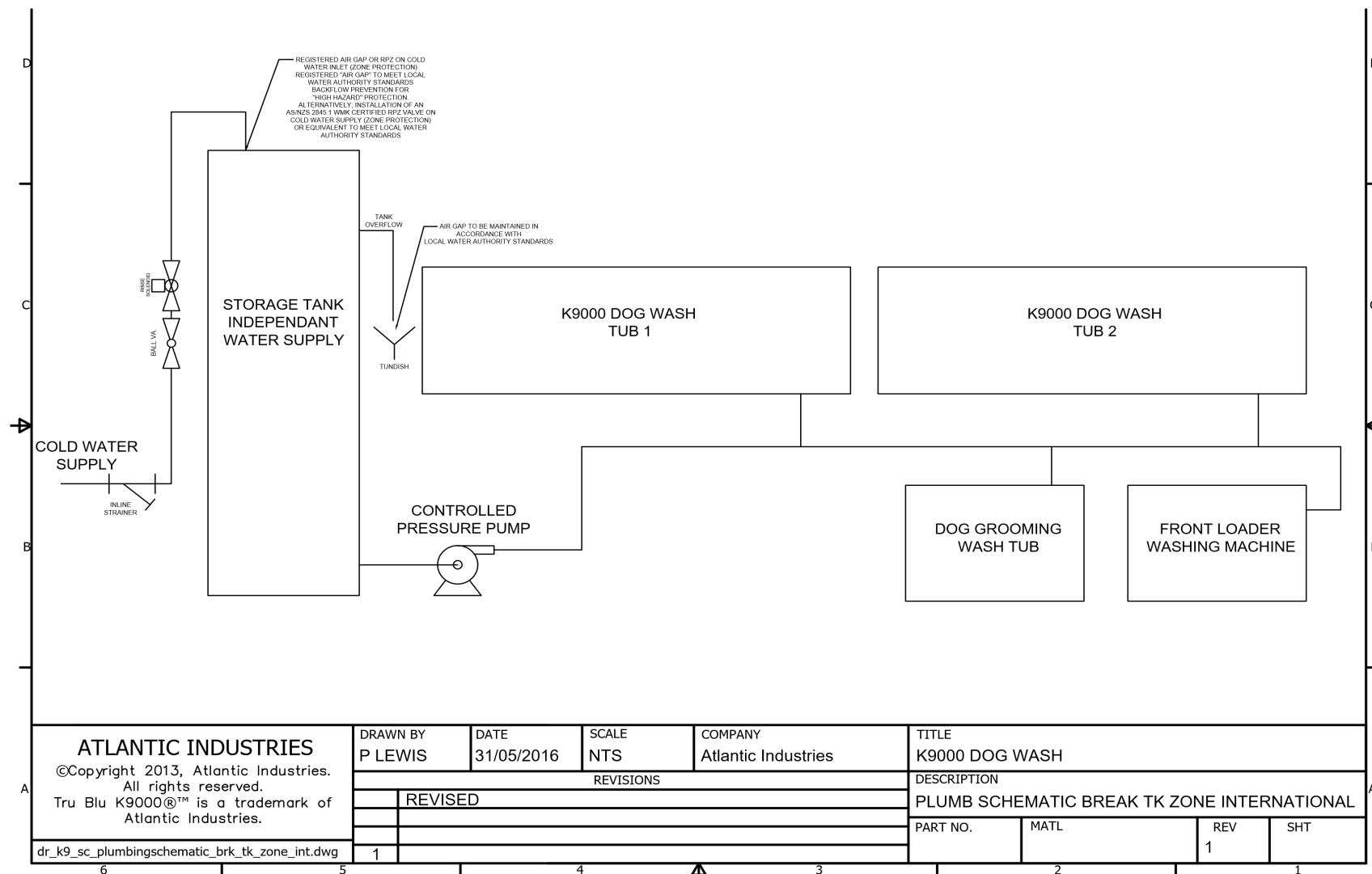
***Note: A minor trade waste application is to be made to the local water regulator (Contact your local water authority trade waste division)*

8 Appendices

8.1 Plumbing Schematic Individual Protection Instantaneous Hot Water International



8.2 Plumbing Schematic Break Tank Zone International



8.3 Plumbing Schematic Zone Protection International

