



IDEAL TANK & SYSTEM SOLUTIONS

WasteWorx[®]

PUMPING STATION SOLUTIONS

For Flexible System Design.

WASTEWORX OWNERS MANUAL & INSTALLATION GUIDE

WASTEWATER OR STORMWATER
REMOVAL SYSTEM



WasteWorx Owner's Manual & Installation Guide August 2022

Ph: 09 263 7741, Fax 09 263 7743, 49 McLaughlins Rd, Wiri 2104, PO Box 12663 Auckland 1642,
sales@apd.co.nz - www.apd.co.nz



IDEAL TANK & SYSTEM SOLUTIONS

Congratulations on the purchase of a WasteWorx Pump Station. All of our WasteWorx Pump Stations are sized and manufactured to meet your site requirements, allowing for easy installation and providing you with a dependable solution for your wastewater needs.

- WasteWorx Pump Stations are supplied with internal pipework and high level float pre-fitted ready for pump (included) to be connected.
- WasteWorx sewer pump stations are supplied with either a Grinder or Macerating Pump to meet site requirements.
- WasteWorx stormwater pump stations are supplied with a suitable pump or pumps.
- Wall mountable pump controller included, with high level alarm and pump overload protection.
- Made from tough recycled polyethylene that will not rot or corrode.
- Unique webbed base design eliminates the need for concrete to be used during installation when the station is too short to use ground anchors.
- Supplied with either a plastic lid for lawn installation or adjustable riser for installation of steel manhole cover in concreted/paved area or driveway.





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DRAWING NOTES

These drawings shall be read in conjunction with all architectural, geotechnical and other consultants drawings and specifications and with such other instructions as may be issued during the course of the contract. All discrepancies shall be referred to the engineer for decision before proceeding with the work.

All dimensions relevant to setting out and off-site work shall be verified by the contractor before construction and fabrication is commenced. The engineers drawings shall not be scaled.

During construction the contractor shall be responsible for maintaining the stability of the structure until its completion and shall ensure that no part of the structure is overstressed by excessive loading.

Workmanship and materials shall be in accordance with the relevant New Zealand standards and local authority regulations, except where varied in contract documents.

The location, size, and details of all penetrations, holes, etc in structural members must be approved by the engineer prior to construction unless otherwise shown on structural drawings.

Substitution for or amendment of specified details or materials shall not be carried out without the approval of the engineer.

TANK LOCATION - PROXIMITY TO NEARBY STRUCTURES

The location of the tank excavation is the responsibility of the contractor and the tank owner. The contractor is to follow the limitations of the diagrams shown or notify a chartered professional engineer for a site-specific consultation. The contractor is to ensure nearby foundations of new and/or existing structures are not undermined by the excavation for the tank.

EXCAVATION CLEARANCE

The contractor is to ensure a minimum of 200mm between edge of tank and edge of excavation wall at the narrowest location.

SOIL CONDITIONS

This design assumes site soils will meet the requirements of NZS3604:2011 classification of 'good ground'. The contractor is to confirm the site exhibits these properties or notify a chartered professional engineer for consultation. For IL2, 50 years design life, $Z \leq 0.4$



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TEMPORARY SUPPORT & SHORING

Temporary support and shoring during excavation and preparation is the responsibility of the contractor and should be in accordance with health and Safety at Work Act 2015 (HSWA), the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016 (GRWM Regulations) and the Health and Safety in Employment Regulations 1995 (HSE Regulations), Regulation 24 for excavations with face more than 1.5m high (as below):

1. Subject to subclause (2) of this regulation, every employer shall take all practicable steps to ensure that, where any face of any excavation is more than 1.5m high, that face is shored
2. Subclause (1) of this regulation does not apply where:
 - a. The face is cut back to a safe slope; or
 - b. The material in the face is of proven good standing quality under all reasonably foreseeable conditions of work and weather; or
 - c. By reason of the nature of the work and the position of any employee in the vicinity, there is no danger to any employee; or
 - d. The provision of shoring is impracticable or unreasonable by reason of the nature of the work and the employer takes all practicable steps to ensure that other precautions are taken to make the face as safe as possible in the circumstances.
3. Every employer shall take all practicable steps to ensure that any shoring used in any excavation at the place of work:
 - a. Consists of materials that are suitable for the purpose for which they are to be used, of sound quality, and adequate strength for the particular use; and
 - b. Has bracings, jacks, and struts that are securely held to prevent accidental displacement, and packings and wedges that are held by nails or spikes; and
 - c. Is placed in a proper manner by a by an experienced person under competent supervision; and
 - d. Is not altered, dismantled, or interfered with except on the instructions of the employer or a representative of the employer.

BACKFILL & BASECOURSE

Backfill and basecourse material to be either:

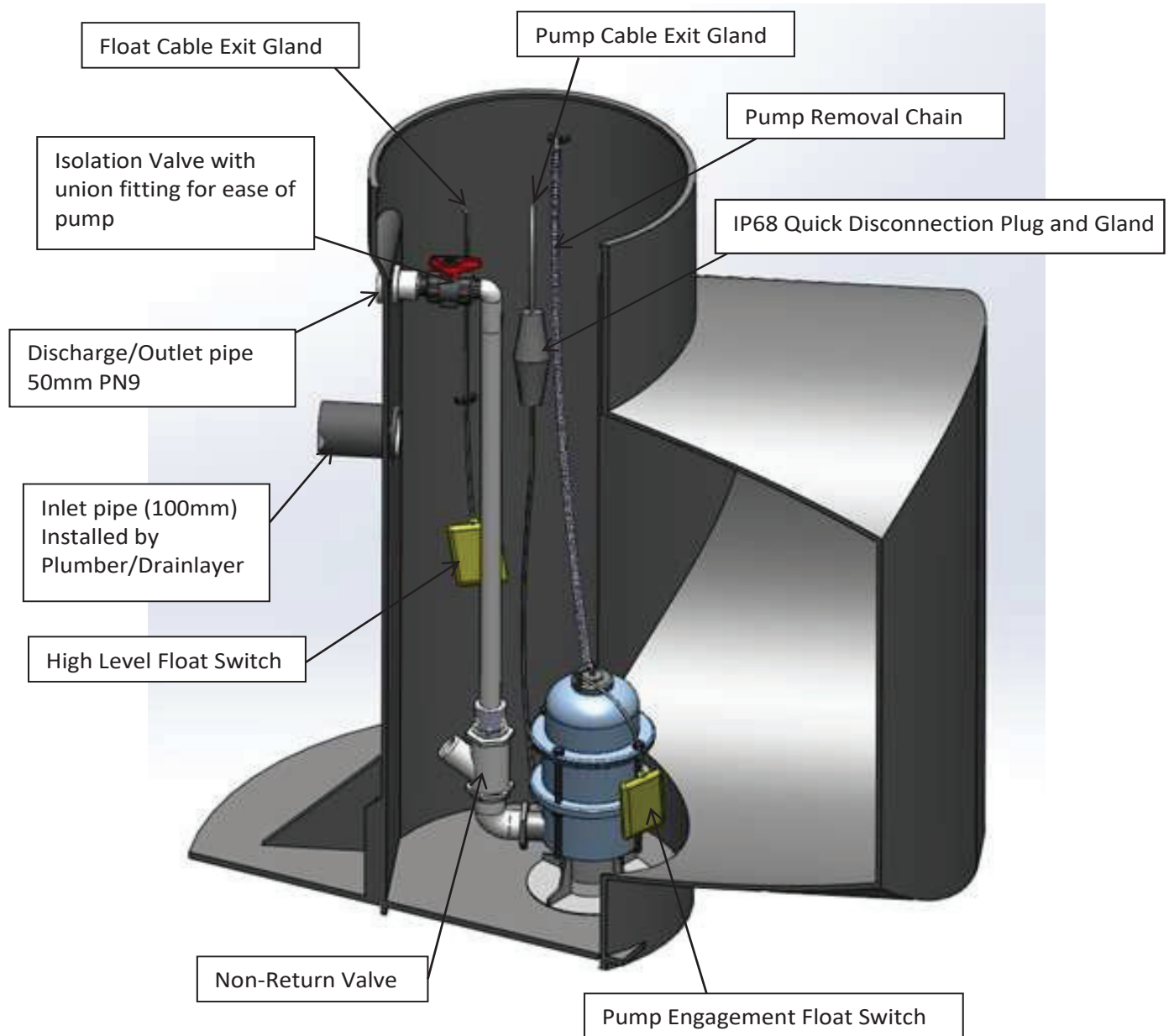
Crushed stone or gravel: washed, with angular particle sizes no larger than 20mm with no more than 5% passing a 2.36mm sieve. Dry density must not be less than 1500kg/cubic metre. Approved backfill should not be mixed with sand or native soils and should always be brought up to at least 150mm above tank crown level. The use of non-specified backfill material could result in tank failure. Gap20 is acceptable.

Or if crushed stone or gravel is not available, then specific quarry aggregate mix of:

Naturally rounded gravel: clean naturally rounded aggregate with particle sizes no larger than 19mm with no more than 5% passing a 2.36mm sieve. Dry density must not be less than 1500kg/cubic metre.

The contractor is to work in maximum backfill lifts of 300mm. After each lift, the contractor is to use long handled probe to work the backfill material under the entire length of the tank and within any ribs. All voids and spaces should be filled to ensure adequate support of tank.

WASTEWORX PUMP STATION DIAGRAM





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FREQUENTLY ASKED QUESTIONS

HOW CAN I TELL IF MY PUMP STATION IS WORKING PROPERLY?

A: All WasteWorx Pump Stations come with a control panel. If your pump station is working properly you shouldn't notice anything. The pump is activated automatically once the chamber has been filled to a certain level. If there is a problem the red light on top of the control panel will go on and you will hear the audible buzzer as well. If the alarm doesn't turn off after several minutes please phone your service agent.

WHAT HAPPENS DURING A POWER OUTAGE?

A: During a power outage the pump will not be able to operate and the chamber will continue to fill without being emptied by the pump so you will need to minimise water usage until the power is restored. You may notice the high-level alarm being triggered when the system turns back on, this should turn off once the pump has emptied the chamber.

WHAT DOES PUMP OVERLOAD SIGNAL MEAN ON THE CONTROL PANEL?

A: This can sometimes mean there is a blockage, if the alarm doesn't turn off after several minutes please phone your service agent.

WHAT DO I NEED TO DO IF I AM GOING AWAY ON HOLIDAY FOR A FEW WEEKS OR MORE?

A: Turn on tap and run clean water down the sink until the pump turns on then shut the water off, this will help to purge the chamber of debris that might dry out while you are away. Do not turn off the power to the unit.

HOW LOUD IS THE PUMP?

A: The pump is about as loud as a dishwasher when it is running, normally you would only hear it if you are within a couple of meters or standing on top of it.

WHAT DOES THE PUMP STATION COST TO RUN?

A: Our standard range of pumps will use approximately \$2.00 - \$3.00 worth of electricity per month or \$24.00 - \$36.00 per year based on an average household water usage.

