

28 February 2017

Stormwater360 New Zealand
PO Box 302 890
North Harbour Auckland

Attn: Troy Brockbank

Dear Mr Brockbank

Re: Product Acceptance – Stormwater360 Jellyfish Filter®

Effective Date: 28 February 2017

Expiry Date: 28 February 2022

This letter sets out Auckland Council’s conditional acceptance for vesting of the Stormwater360 –Jellyfish Filter. The acceptance is valid for 5 years, at which time the acceptance will be re-assessed.

This acceptance for vesting as a public asset follows the Interim Proprietary Device Evaluation as specified in “Stormwater360 Jellyfish Filter, Interim Proprietary Device Evaluation June 2016”.

The details and conditions of the acceptance are as follows:

- Product:** The Stormwater360 Jellyfish Filter® is an underground precast manhole or vault that houses up flow membrane filter cartridges to provide stormwater quality treatment.
- Standards:** As specified in the product documentation dated October 2016 and submitted with the application document. Standards include but are not limited to:
- Access cover and frame: AS 3996:2006
 - Concrete vault: NZS 3109:1997, NZS3114:1987, AS/NZS 4058:2007
 - Structural design: HN-HO-72, HN or 0.85HN in accordance with NZTA’s Bridge Manual (2013) or per the load requirements of any approving jurisdiction, whichever is more stringent.

Manufacturer:

Contech Engineered Solutions, 9025
Centre Point Drive Suite 400, West
Chester, Ohio 45069, USA

NZ Supplier:

Stormwater360 New Zealand
PO Box 302 890
North Harbour, Auckland

Acceptance Process: Conditional Acceptance confirms that Auckland Council has assessed the overall system as being suitable for use for public stormwater systems, within certain conditions. Evaluation of the suitability of this option for a specific project is required for each proposed application on a case by case basis. The following information will be required for each evaluation:

- Lifecycle costs;
- Maintenance frequency and cost (based on a minimum of annual cleans);
- Asset life and renewal cost;
- Designer statement on the safe installation, use, maintenance and disposal implications for the asset;
- Assumptions for the sourcing and disposal of cartridge media, including resilience of supply.

<p>Approved for:</p>	<ul style="list-style-type: none"> ▪ Use in Stormwater Infrastructure installations across the Auckland region for assets to be vested to Auckland Council where: <ul style="list-style-type: none"> ○ Best Practicable Option (BPO) analysis proves that Council’s preferred management approach of using water sensitive design and green infrastructure is not feasible, or not cost-effective. ○ Design, installation and maintenance is in accordance with Auckland Council’s publication: “Stormwater360 Jellyfish Filter, Interim Proprietary Device Evaluation June 2016”. ○ an appropriate maintenance mechanism and programme is provided to retain the products design functionality and maximise its design life ○ roads classified as non-arterial local roads/street (as defined in ATCOP) ○ soil bearing capacity is checked by a suitably qualified geotechnical engineer
<p>Not approved for:</p>	<ul style="list-style-type: none"> ▪ Use in arterial or collector roads (unless specifically authorised by Auckland Transport or NZTA) ▪ Use as a stormwater detention device ▪ Location within trafficked lanes unless the access cover is specifically designed for traffic loading
<p>Comments:</p>	<ul style="list-style-type: none"> ▪ All applications must be in accordance with: <ul style="list-style-type: none"> ○ Auckland Code of Practice for Land Development and Subdivision, ○ Stormwater treatment device sizing (current document of TP10 or GD01), ○ Current regulatory framework: Auckland Unitary Plan. ○ National Policy Statement - Freshwater 2014 ▪ Additional design requirements: <ul style="list-style-type: none"> ○ The design life for the concrete vault shall be 100 years ○ The device is in an off-line configuration to ensure that only flow rates up to the water quality flow are routed through the filter.

Please note that the acceptance of this product by Auckland Council does not constitute endorsement. This letter may not be used for advertising purposes.

The acceptance pertains to the product as described in Stormwater360 application and the supporting documentation. Auckland Council reserves the right to review and revoke approvals at any time. Auckland Council must be notified immediately of any change in the product, including but not limited to: name, design and recommended use.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'Sarah Sinclair', written in a cursive style.

Sarah Sinclair
Chief Engineer
Engineering & Technical Services
Infrastructure & Environmental Service Division
AUCKLAND COUNCIL