

14 September 2017

Stormwater360 New Zealand
PO Box 302 890
North Harbour Auckland

Attn: Troy Brockbank

Dear Mr Brockbank

Re: Product Acceptance – Stormwater360 Filterra®

Effective Date: 14 September 2017

Expiry Date: 14 September 2020

This letter sets out Auckland Council's conditional acceptance for vesting of the Stormwater360 –Filtterra® bio filtration system. The acceptance is valid for 3 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 Filterra® system, Interim Proprietary Device Evaluation: Final November 2016".

The details and conditions of the acceptance are as follows:

Product: The Stormwater360 Filterra® system is an underground precast vault that contains an engineered rapidly draining media and a 75mm top layer of specified non-floating mulch. A variety of plant species can be planted in the device to provide amenity value and to improve the stormwater quality treatment.

Standards: As specified in the product documentation and submitted with the application document. Standards include but are not limited to:

- Concrete structures standard: NZS 3101:2006
- Concrete construction: NZS 3109:1997
- Specification for concrete surfaces finishes: NZS 3114:1987
- Precast concrete pipes : AS/NZS 4058:2007
- Access cover and frame: AS 3996:2006
- NZTA's Bridge manual (May2013)

Manufacturer and 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 cost (based on a minimum of two annual cleans and mulch replacement);
- 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 filter media (mulch and engineered drainage 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 the device is the most suitable option. ○ Design, installation and maintenance are in accordance with Auckland Council’s publication: “Stormwater360 Filterra® system, Interim Proprietary Device Evaluation November 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). ○ Only easy and cost effective replaceable grasses and shrubs are planted in the device.
<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/retention device ▪ Larger plants like trees to be placed in the device
<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, ○ 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 around 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 blue ink, appearing to read 'Sarah Sinclair', with a small '199' written above it.

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