



Multi-unit social housing developments are a key to urban intensification and addressing housing shortages in New Zealand. Within Auckland, they can present issues as car parks are considered high contaminant generating and require high levels of treatment prior to discharging to attenuation tanks or receiving streams.

Biofiltration solutions present many benefits for a project including excellent treatment, no proprietary components and simpler maintenance, mirroring cultural values about stormwater treatment and providing great amenity value. However, these are often discounted for tight urban sites due to the large footprint required (typically 2% of the catchment area).

The innovative solution used at Atkinson Ave collected stormwater from a 1,400m² car park into a conveyance swale using flush kerbs and treated the water using a single Filterra by Stormwater360. The Filterra footprint was 6.5m², whereas a traditional rain garden would need to be at least 30m² to treat the same area. Using 75% less area to treat the same catchment allowed green infrastructure to be used where it would otherwise be impossible.

Stormwater360 also custom-designed this Filterra® to accept flow from either end of the swale, with high flows bypassing into the upstream scruffy domes. A neat solution for the layout of this site, Stormwater360 can custom design units for any project.

