

Stormwater catchpit safety

1. Introduction

On 3 June 2017 a young woman, Violet Tupou, lost her life in a road catchpit in Favona, South Auckland. This was the second recorded catchpit fatality in New Zealand, the first being the death of a man in 2012 in a car park in Wellington. Both were members of the public retrieving personal items dropped into a catchpit.

Following this tragedy, Auckland Council and Auckland Transport undertook a review into safety at catchpits. This webpage provides resources for street designers on catchpit safety.

If you lose an item in a catchpit, or see a missing, dislodged or damage catchpit call [09 301 0101](tel:093010101).

2. Catchpit safety improvements

- a. The most widely used grate across Auckland's 180,000 catchpits is a heavy (48kg) cast iron grate. It is the weight of the grate that keeps it closed.
- b. As these deaths have so tragically highlighted, grates are relatively easy to open without any tool. Once opened (or if a grate is stolen or missing), it presents a very real risk of entrapment and drowning.
- c. Auckland Council and Auckland Transport's [Catchpit Safety Review: Stage 2 Risk Assessment](#) covered this risk along with a wide range of other risks associated with catchpits. The review found that these risks are best managed by making the grate much more difficult to open by the public.
- d. Now available in the market is a spring-latched, torsion bar self-locking safety grate. A safety performance standard has been prepared and published in the Transport Design Manual (TDM). All catchpit grates in new public road drainage in Auckland must conform to this standard.



3. Public Awareness

Public awareness on catchpit safety risks

In 2018 Auckland Council and Auckland Transport's undertook a public awareness campaign to improve knowledge of catchpit safety hazards and the service Council provides for the retrieval of items from catchpits.

BECOME A WATER-SAFETY HERO

If you see any missing or broken manhole or drain covers then call council urgently on 09 301 0101.

Check your kids play safe and stay away from drains and manholes.

Find out more: visit aucklandcouncil.govt.nz

Auckland Council
Te Kaitiaki o Tāmaki Makaurau

4. Ongoing catchpit safety improvements

Auckland Council and Auckland Transport are committed to increasing safety at catchpits, and are progressing the following actions:

- preparing and rolling out a region-wide public communication plan for improving/refreshing public awareness of safety around catchpits
- allocating \$250,000 annually for the next three years in the asset renewal programme for retrofitting self-locking Safety Grates
- requiring all new catchpits to be fitted with grates that comply with the safety performance standard.

5. Resources

- [Catchpit safety review, Stage 1 \(Opus, August 2017\)](#) PDF 4.09 MB
- [Catchpit safety review, Stage 2 \(Opus, December 2017\)](#) PDF 10.1 MB
- [Public Safety at Catchpits – Lessons from Tragedy \(WSP Opus, Stormwater Conference, June 2019\)](#) PDF 3.18 MB
- [Catchpit safety update memo \(WSP, June 2020\)](#) PDF 15 MB
- [Transport Design Manual – Engineering Design Code: Road drainage and surface water control, version 1.2 \(Auckland Transport, April 2021\)](#) PDF 12 MB