

Data Isn't Built  
in a Day

# **NZ Building Outlines Coverage**

**May 2019  
December 2019**



# NZ Imagery

A

Since 2012, LINZ has worked with councils and other government departments to better coordinate the acquisition and dissemination of aerial imagery.



# NZ Imagery

1999

A



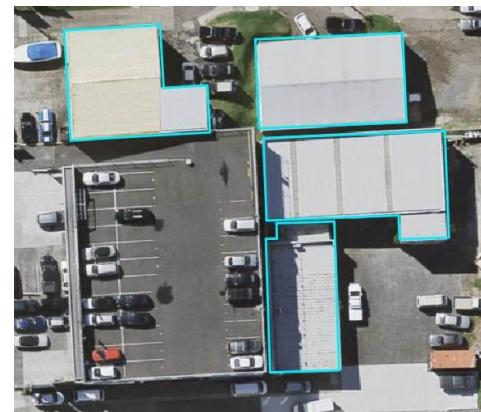
# Feature Extraction

B

An external supplier provides us with building outlines aligned with the aerial imagery. The buildings are extracted using automated feature extraction methods.

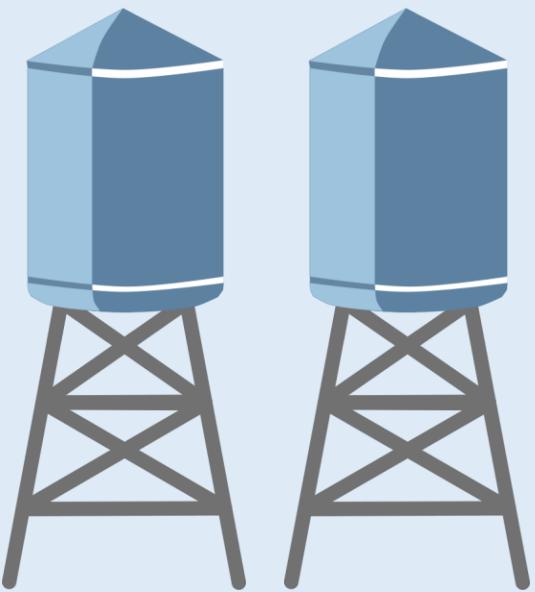


## Poorly outlined or missing building outlines



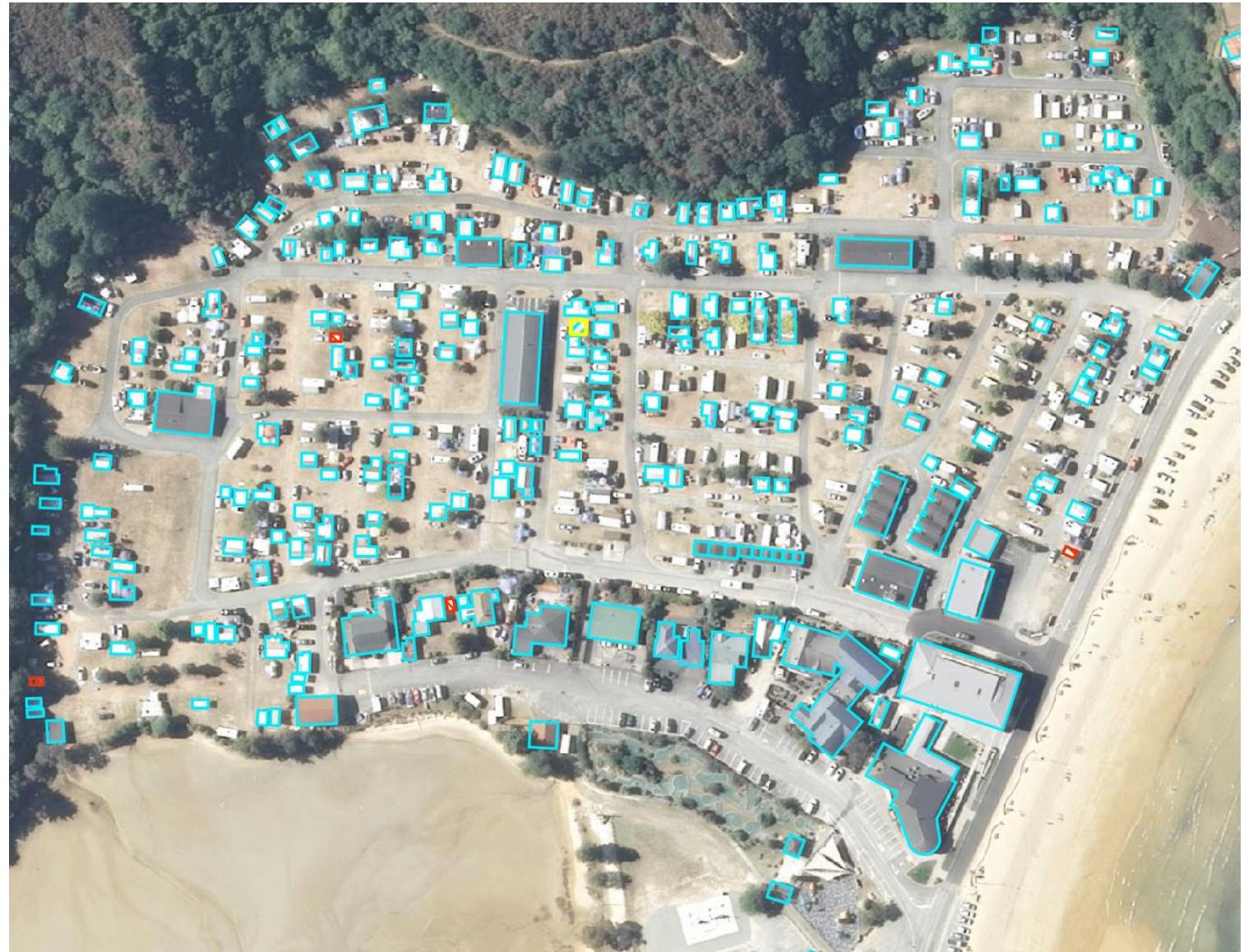
## Undersized and multiple tanks

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## **Caravan/Campervan and holiday park**

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## **Caravan/Campervan and holiday park**

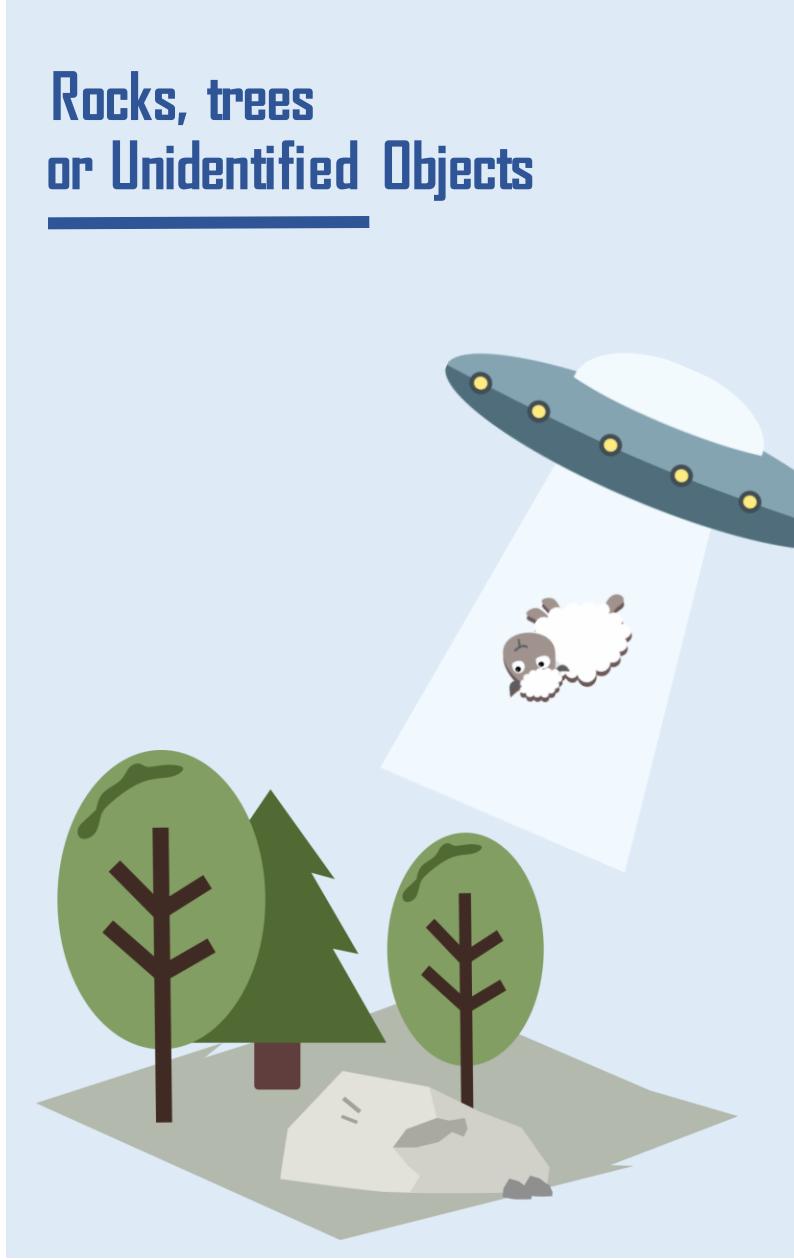
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# Caravan/Campervan and holiday park



## Rocks, trees or Unidentified Objects

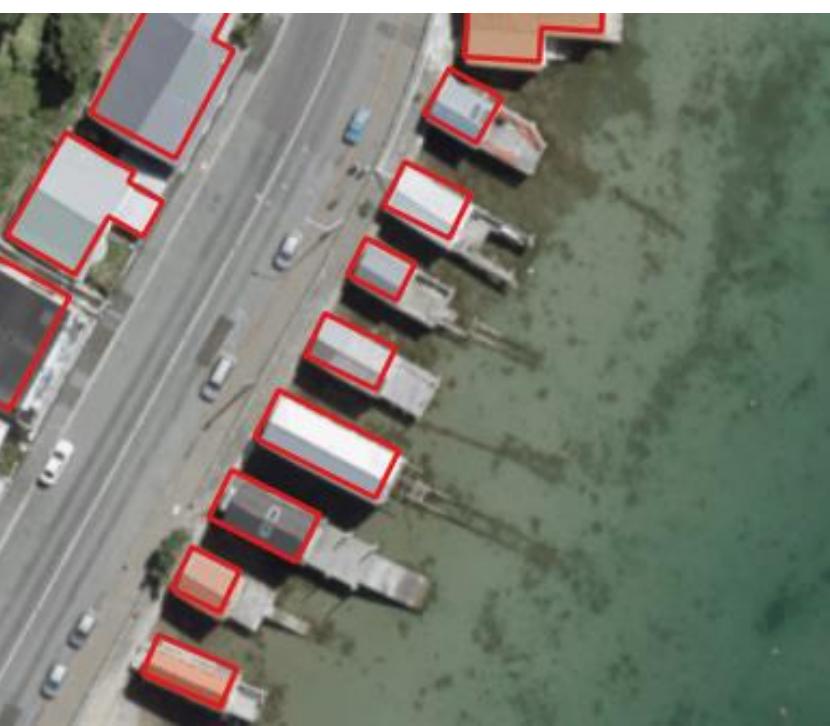
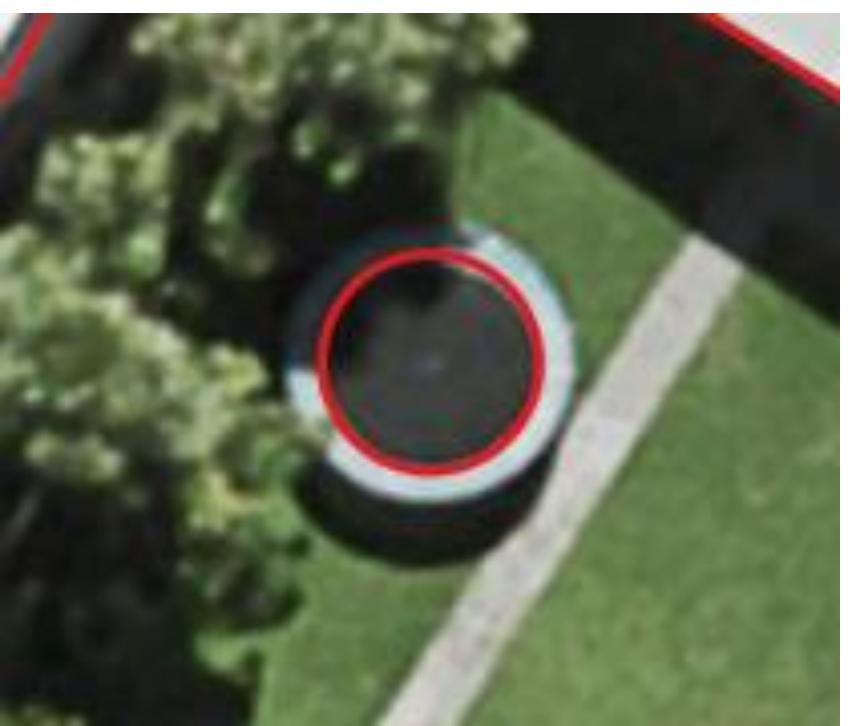


# QA

- Building overlaps
- Buildings not within coastline
- Buildings overlap water feature
- Buildings within protected area
- Large buildings
- Small tanks
- Missing huts
- Random Subset

C

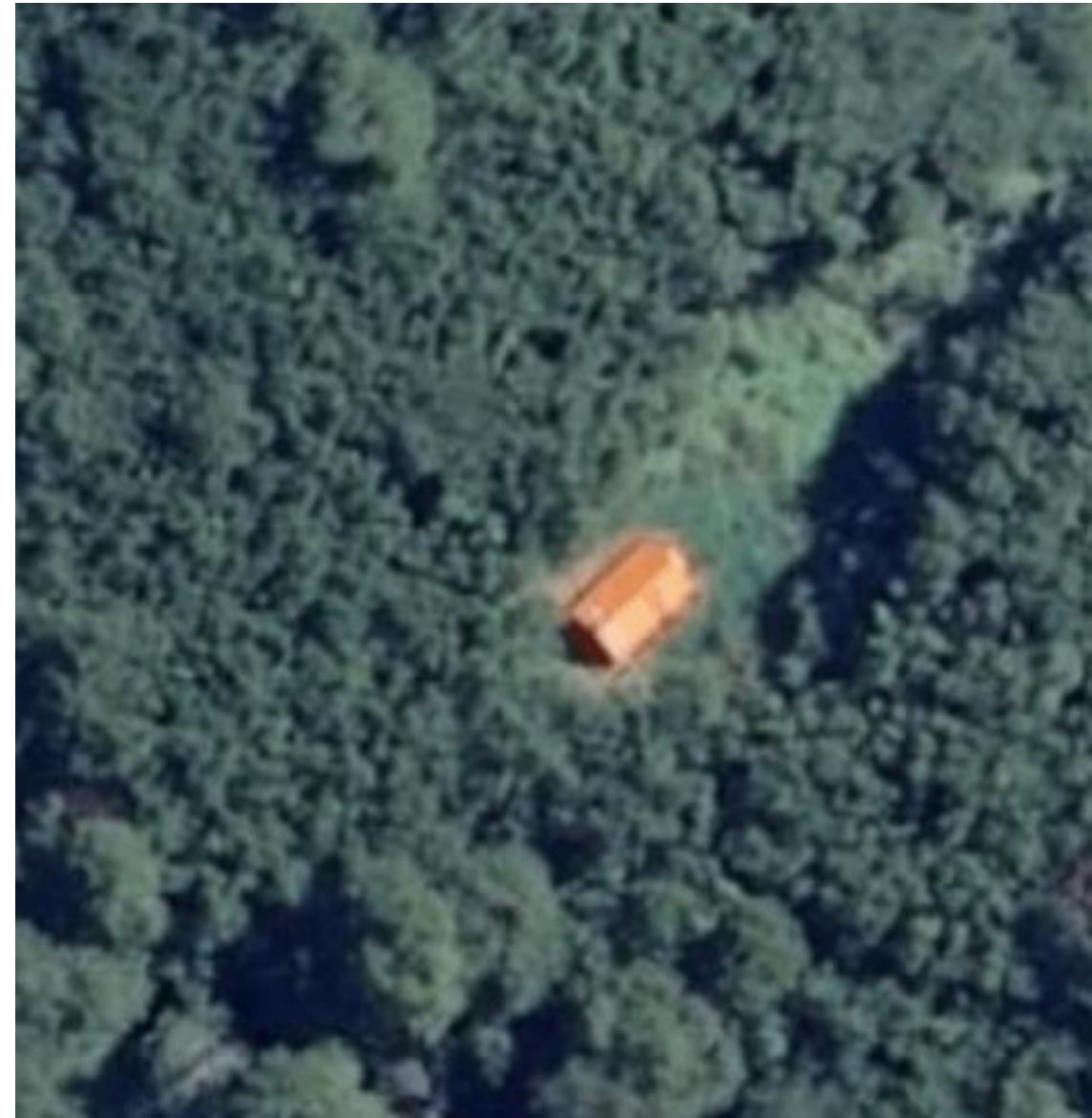
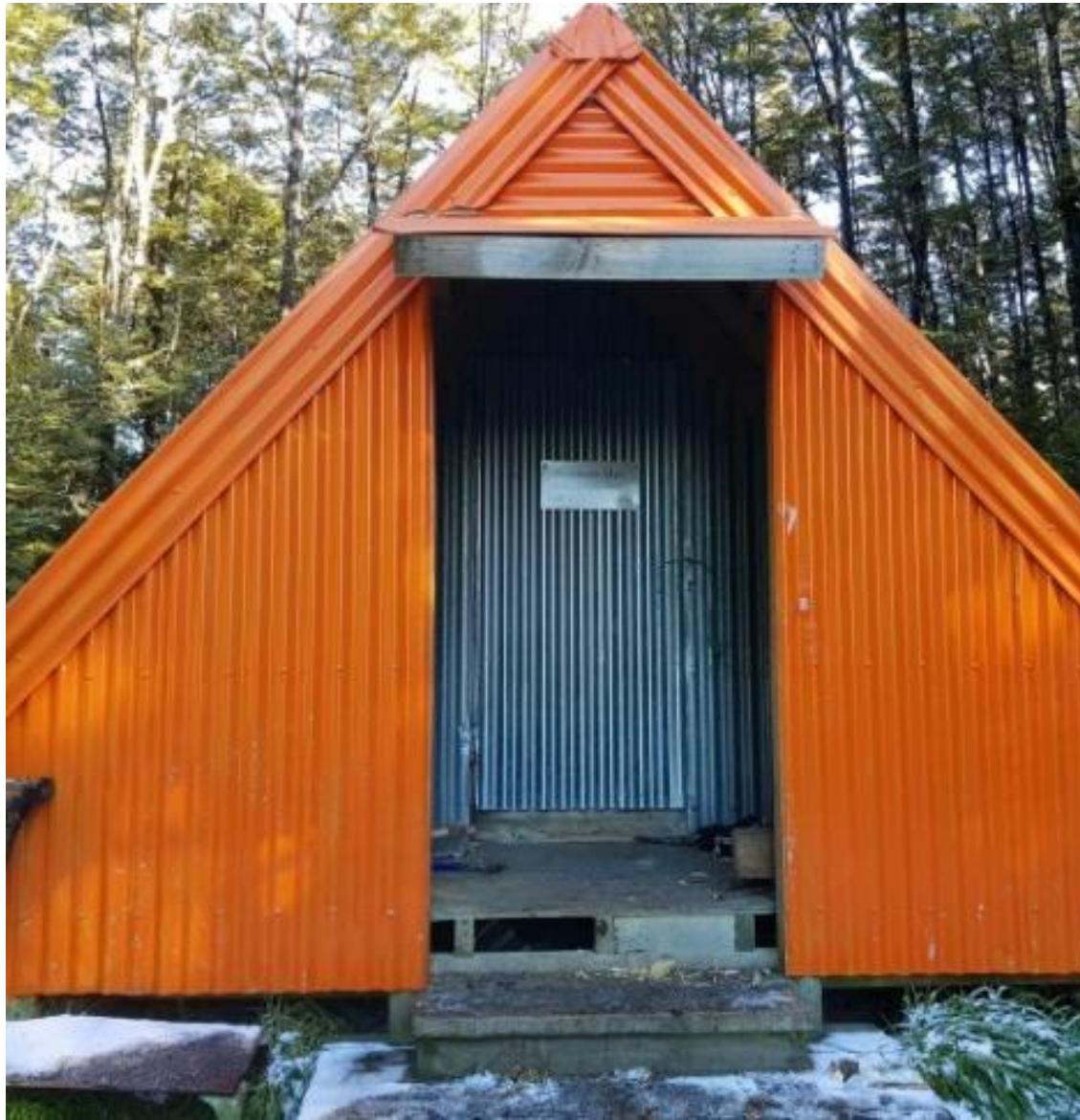




# Huts & Shelters

D







# Larkins Slip Hut

Whakaari Conservation Area, Otago

Backcountry, 0 Bunks

**HUT HAS BEEN REMOVED**

**Water Source**

Roof into tank

**Location**

NZ Topo 50: CB10 425 218

NZTM Grid Ref: E1242450 N5021795

Lat/Long: -44.867501 168.473889

Elevation: 1712m

**Notes**

Hut destroyed. The hut is shown on 2009 topomaps & listed on some other websites, including a 2011 photograph showing the hut standing, however the walls have folded in leaving only the roof intact.

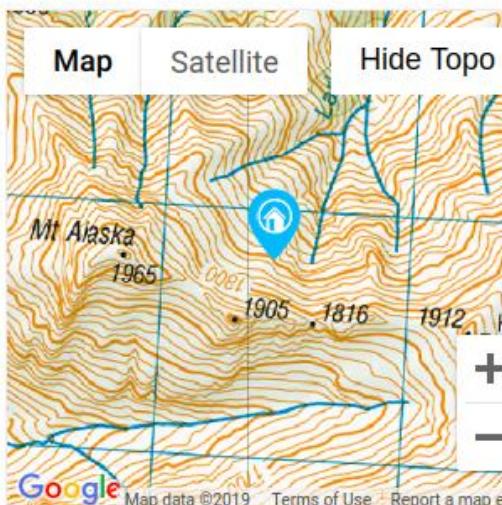
**Added By**

madpom

**Recently Bagged By**

Jordon, gravelben, davety, topergarden, billmalone, Dean, madpom

[BAG THIS HUT](#)









# How did we do it?

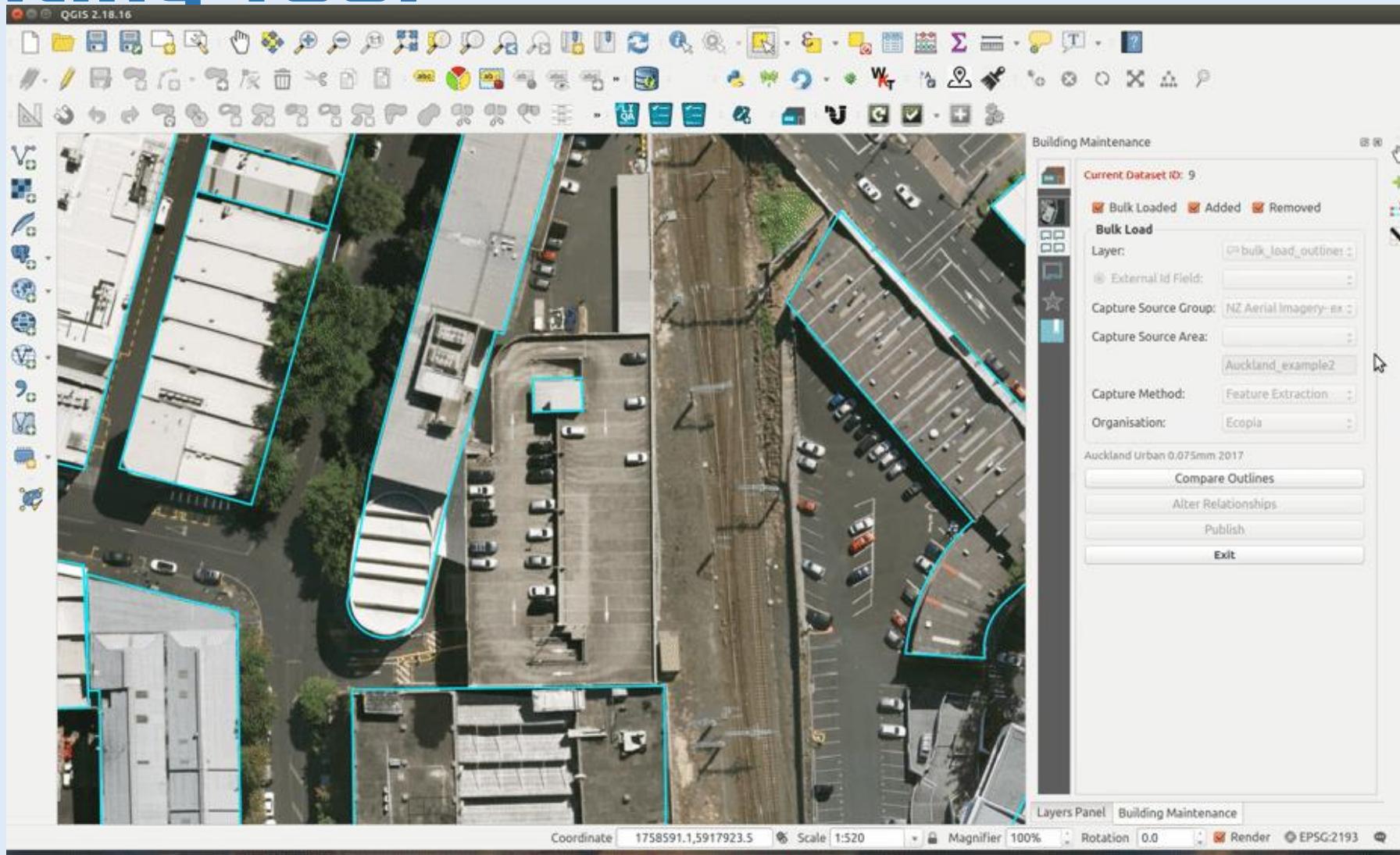
E



# We Used a lot of Code

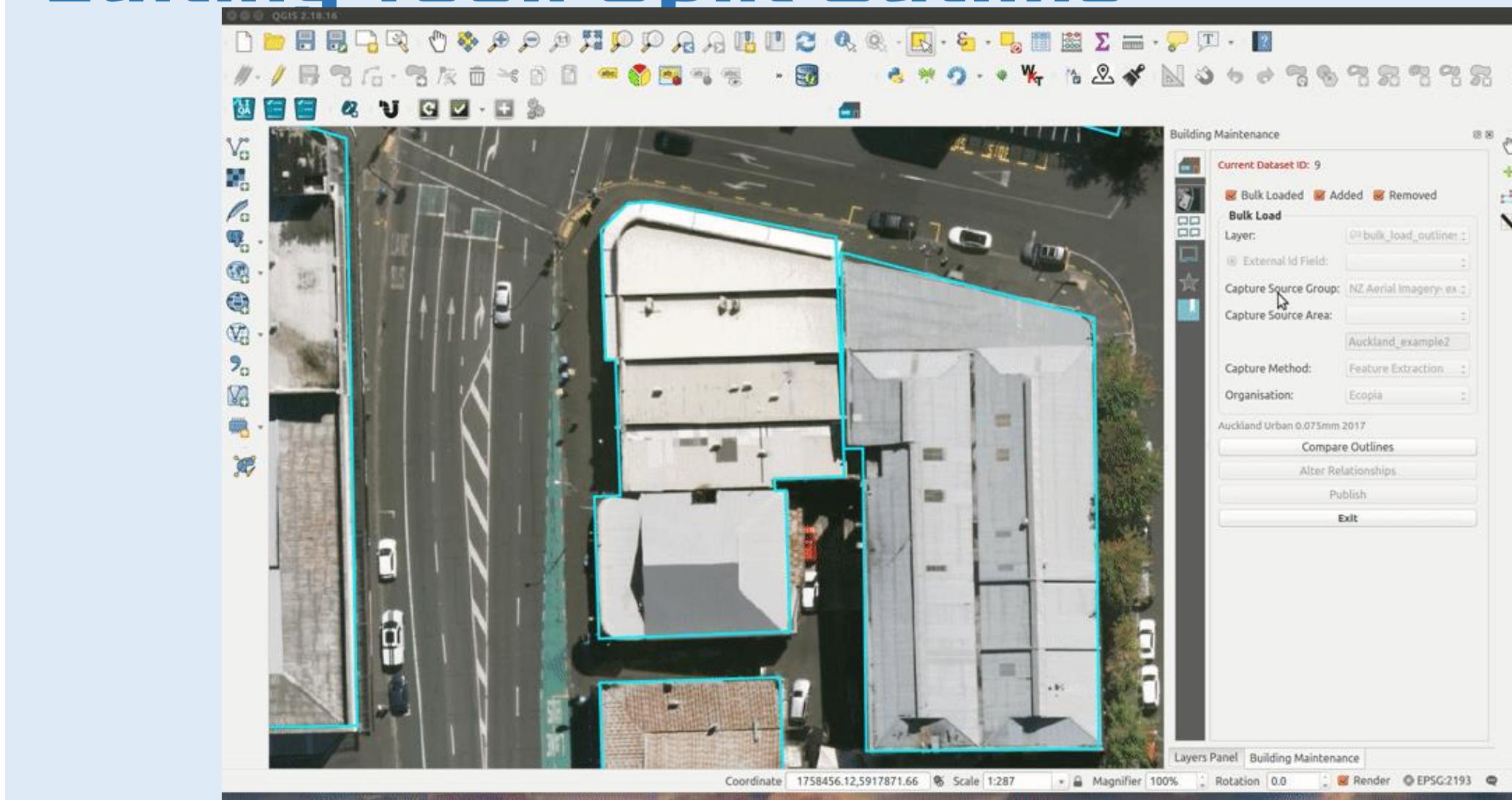


# Editing Tool

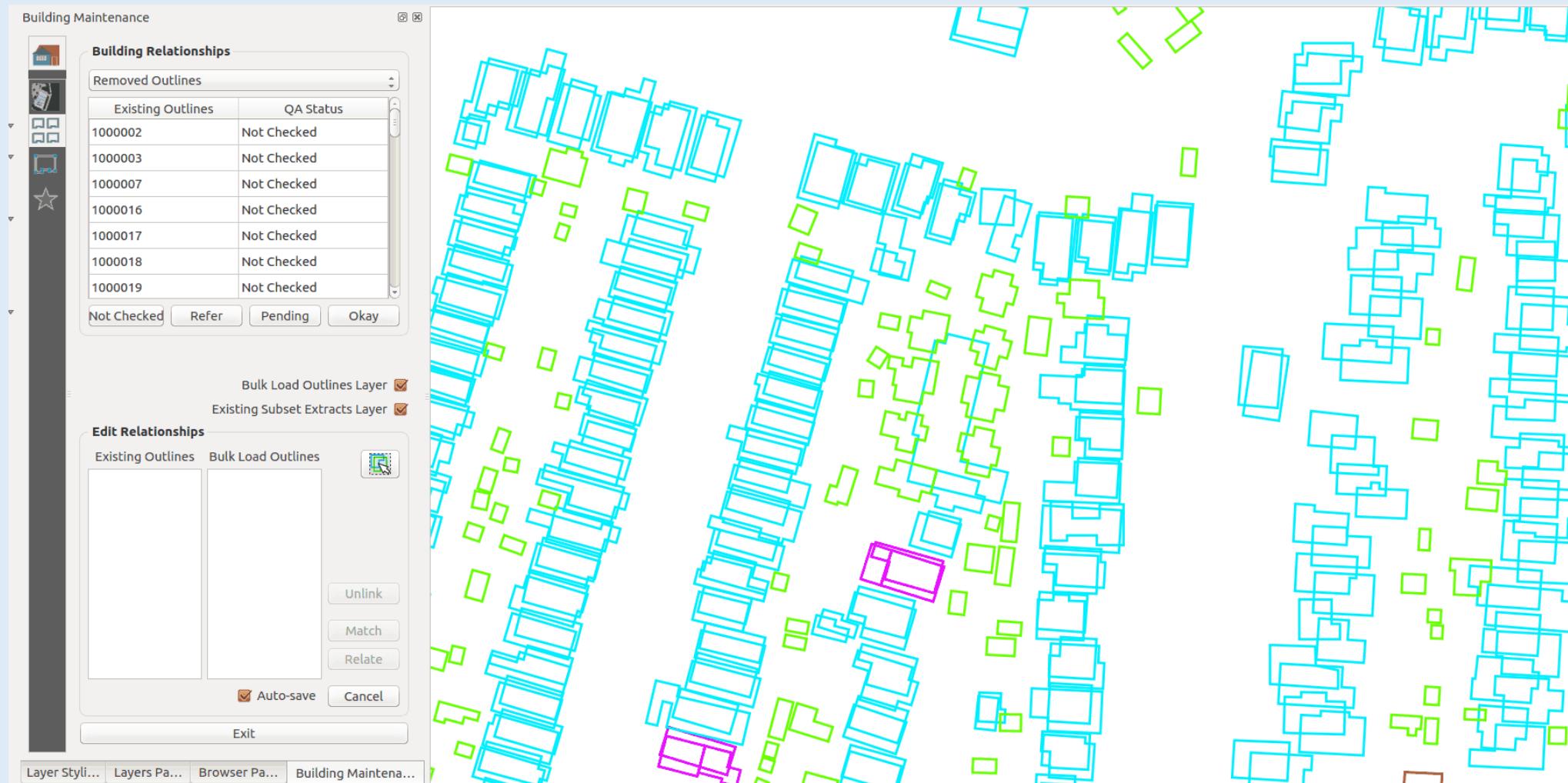


- Add Outline
- Edit Geometry
- Edit Attribute

# Editing Tool: Split Outline

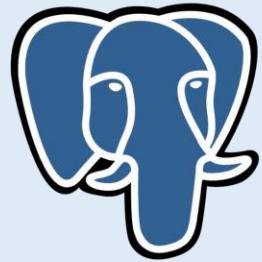


# Making and Breaking Relationships



# What we used

Free and Open Source



PostgreSQL



PostGIS

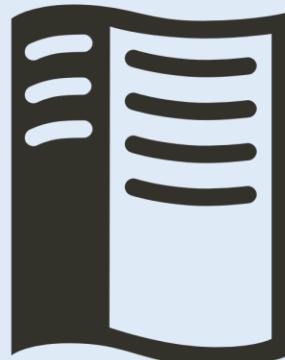


Sphynx

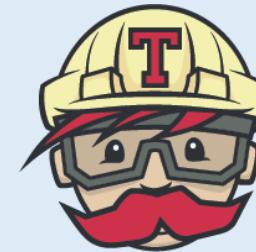
Free for Open Source



Github



Read the Docs



Travis CI

# Release

F



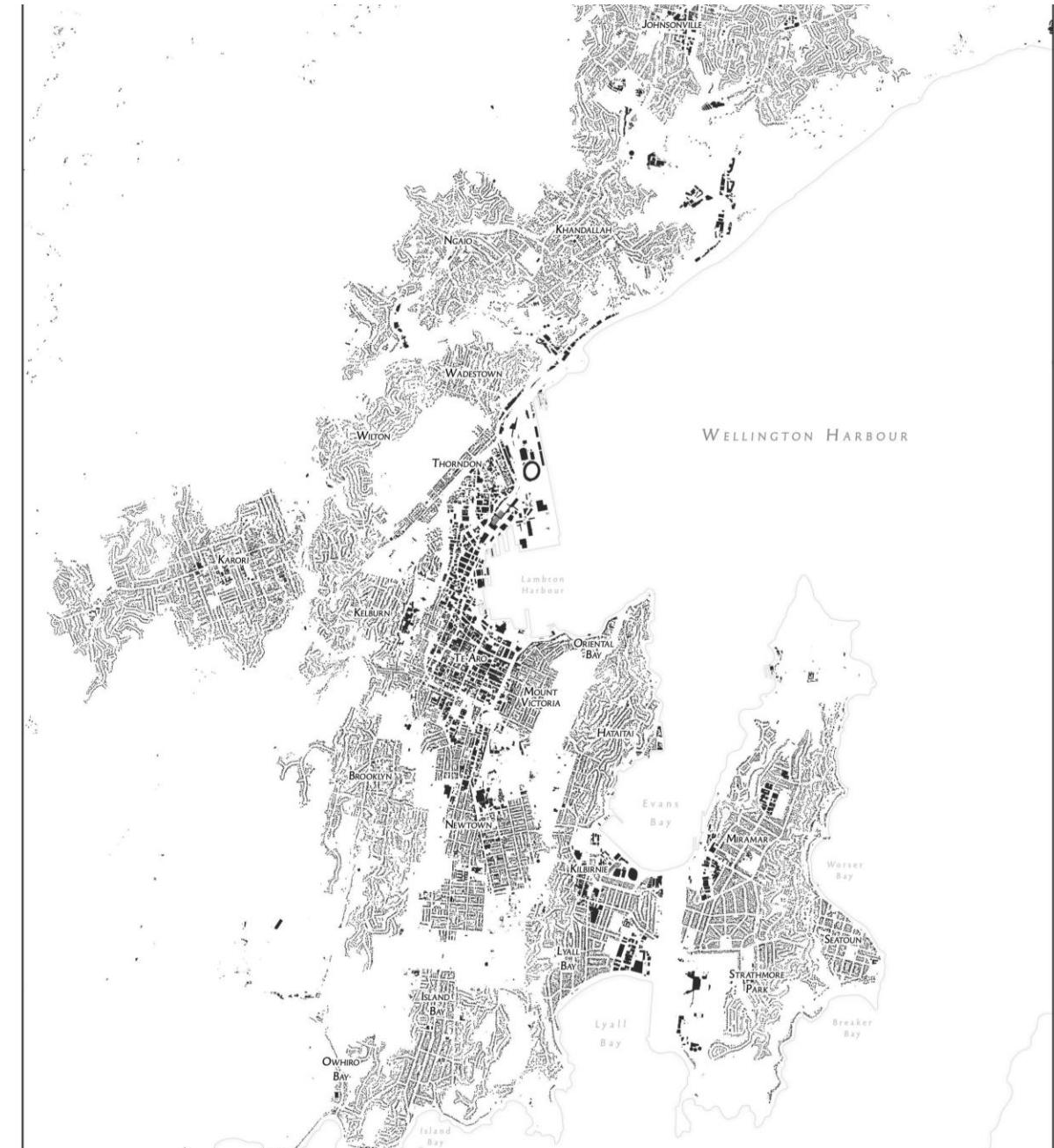
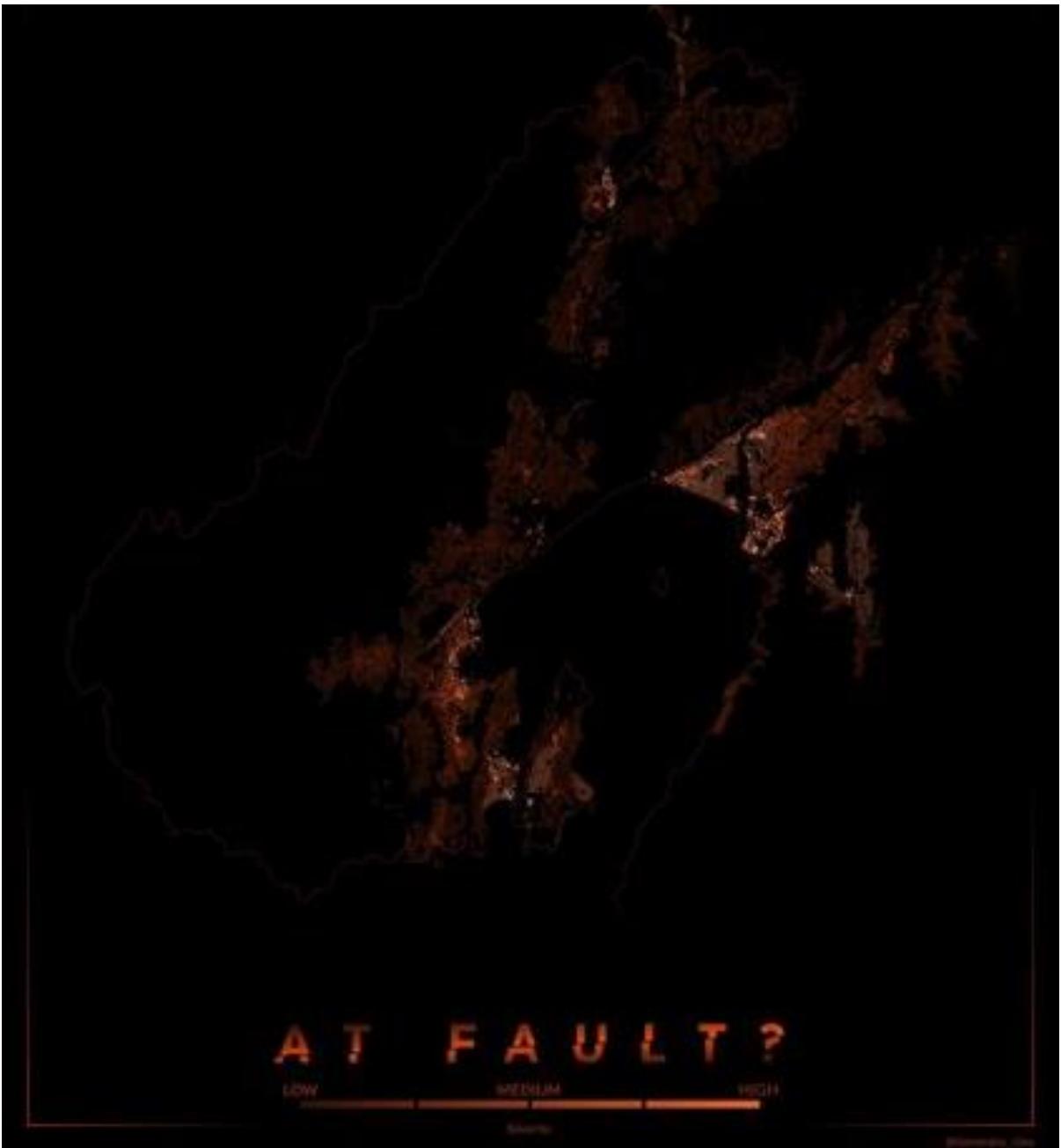


# Uses So Far

G







# Links

<https://github.com/linz/nz-buildings>



<https://nz-buildings.readthedocs.io/en/latest/introduction.html>



<https://data.linz.govt.nz/layer/101290-nz-building-outlines/>



<https://medium.com/on-location/an-open-building-outlines-dataset-for-new-zealand-eef8b558ef7a>



<https://www.youtube.com/watch?v=skkmhbHFtgM>

<https://2019.foss4g-oceania.org/>



Wellington. November 12-15, 2019.  
The stars to guide you.

# Questions

