

# RAA Sinking Pit Cover Assessment

Road being assessed: Brighton Road

Direction and number of lanes tested: Northbound and Southbound, 4 Lanes total.

Date of assessment: 19/5/2017 & 29/6/2017

Total covers assessed: 221

Total covers exceeding comfort benchmark: 59



*Pit cover opposite Stephenson Ave*

RAA visually inspected the top 30 covers exceeding the comfort benchmark on 14/8/2017 and removed false readings and pit covers that we did not believe to be SA water assets from the list.

Below is the list of 18 SA Water pit covers that recorded a high G-Force reading and had visual defects.

Location Description	Max G-Force	Latitude	Longitude	Direction & Lane
Intersection w/ Young Street	-0.135	-35.0268344	138.5236274	NB LH
287 Brighton Road	-0.134	-35.0007684	138.5216764	NB RH
602 Brighton Road	-0.118	-35.0305557	138.5240443	SB LH
518 Brighton Road	-0.1	-35.0222751	138.5232856	NB RH
Intersection w/ Seacombe Road	-0.094	-35.0302890	138.5239085	NB RH
Intersection w/ Gladstone Road	-0.094	-35.0072735	138.5221425	NB LH
Intersection w/ Seaforth Avenue	-0.081	-35.0011656	138.5218099	SB LH
545 Brighton Road	-0.078	-35.0241655	138.5234564	NB RH
503 Brighton Road	-0.077	-35.0198654	138.5231192	NB RH
515 Brighton Road	-0.075	-35.0210531	138.5232079	NB RH
Intersection w/ Torr Avenue	-0.074	-35.0134565	138.5226111	NB LH
Opposite Bothwell Ave	-0.065	-35.0355	138.5243	NB LH
Intersection w/ Quandong Street	-0.072	-35.0051325	138.5221191	SB LH
10m N of Holder Road	-0.071	-35.0077122	138.5222031	NB RH
Opposite Stephenson Avenue	-0.07	-35.0265836	138.5236082	NB LH
597 Brighton Rd	-0.069	-35.0297	138.5238	NB LH
5m S of Mills St	-0.066	-35.0283	138.5239	SB LH
537 Brighton Rd	-0.065	-35.0234	138.5234	NB RH

*Note: RAA have calculated a benchmark comfort G-Force of 0.045G in our test vehicle (2015 Subaru Forester) based on averaging the G-Force of multiple runs over a singular pit cover approximately 50mm deep that was perceived to be uncomfortable when crossed. A verification exercise has been conducted that suggests an error rate of approximately 18% due to road roughness in the vicinity of a pit cover.*