

RAA Sinking Pit Cover Assessment

Road being assessed: **Marion Road in full**

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

Date of assessment: 18-06-2018 and 26-06-2018

Total sites assessed: 294

Total sites exceeding comfort benchmark: 14 (Some with multiple plates)



Series of 5 covers at the intersection with Andrew Avenue

RAA visually inspected all covers that exceeded our calculated comfort benchmark 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 14 sites we believe to be under the care of SA Water, and recorded a high G-Force reading with had visual defects leading to driver comfort.

Location Description	W/WW	Latitude	Longitude	Direction/Lane	Comment
50m N of Ralph St	W	-34.9355391	138.5526528	LH NB	
Intersection w/ Richmond Rd	W	-34.9429866	138.5533388	LH SB	2 covers
Just south of Cross Rd	W	-34.9684352	138.5550022	RH NB	6 covers
20m N of South Tce	W	-34.9715785	138.5552744	RH NB	
Intersection w/ Hawker Ave	W	-34.977197	138.5557172	LH NB	
Intersection w/ Fourth Ave	W	-34.9892775	138.5567677	LH SB	3 covers
Opposite Third Ave	W	-34.9903354	138.5567256	RH NB	
Intersection w/ Andrew Ave	W	-35.0011489	138.5575154	LH NB	5 covers
Near Marion Hotel	W	-35.0043911	138.5579189	LH SB	
Just S of Alawoona Ave	W	-35.0076455	138.5581667	LH SB	3 covers
#788 Marion Rd	W	-35.0095693	138.5581563	LH NB	
#941 Marion Rd	WW	-35.0150513	138.5587455	LH SB	
Intersection w/ Sturt Rd	W	-35.0170541	138.5587437	LH NB	
Intersection with S.Expy Off-ramp	W	-35.0233776	138.5592874	LH NB	

Please see attached shape file using WGS 84 CRS for geocoded locations to use with GIS software.

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.