



Editorial

Welcome to our first newsletter for 2024. As a surveying profession, we are able to be involved with a huge range of projects from local to global.

The articles highlighted in this edition are testament to the variety of areas surveyors can have an impact.

We talk about grade separation for the upcoming Torrens to Darlington (T2D) road project and why this grade separation is so vital.

Infrastructure projects like the State Government initiated Hydrogen and Desalination projects in the Upper Spencer Gulf need significant involvement from surveyors to ensure designs are accurate and that construction works are in the right spot, right size.

The article about the alignment of the sun and the Brighton jetty reflects the surveyor's global measurement techniques including sun and star observations. In more modern times, Satellite technology give surveyors global reach.

We trust your Easter went well and you caught up on your favourite teams at Gather Round.

Opportunity Knocks!

The State Prosperity Project is a mouthful of a name but the State Government has high hopes for the benefits it can bring to South Australia. It is to be located in the Upper Spencer Gulf and the Eyre Peninsula but very much focused on the Whyalla region. (See map below sourced from Government Website)

The core components to this significant long term project are a new Desalination Plant on the Eyre Peninsula, to take the pressure of current water sources (such as the Great Artesian Basin and the River Murray) for mining, industry and townships. This will then allow great expansion possibilities.

The other big idea is the production and use of Hydrogen. Water and power are the two key ingredients for the production of Hydrogen and this region has abundant seawater and a growing abundance of cheap renewable power. It also has a major industry in Whyalla Steel ready to transition to Green Steel with the use of this locally produced Hydrogen.

It's a very exciting outlook for the Upper Spencer Gulf region.



Ed - Michael

Competition Time!

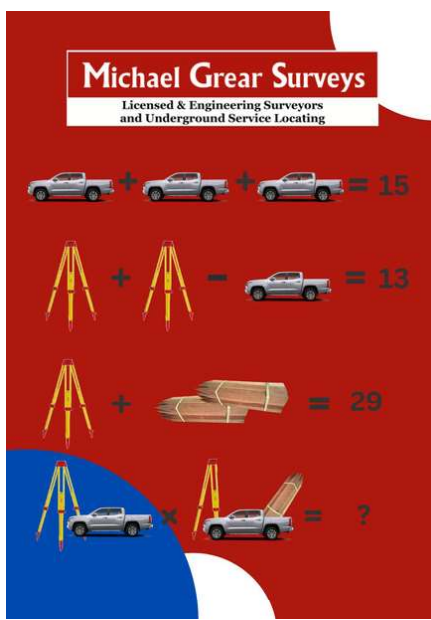
What could the last answer be?

Let us know what you think - admin@mgsurveys.com.au
Coffee voucher for all those who share.

Quote of the Day

Life is like riding a bike.
To keep your balance, you must keep moving.

Albert Einstein



South Road - Why Grade Separation?

South Road is really ramping up. But why do we need this? What are some of the benefits of grade separation / the tunnels on South Road?

Grade separation roads offer numerous benefits that enhance traffic flow, safety, and overall transportation efficiency. They significantly reduce congestion by eliminating intersections and allowing traffic to flow smoothly without interruptions from cross streets or railway crossings. This results in shorter travel times, reduced fuel consumption, and lower vehicle emissions, contributing to improved air quality and environmental sustainability. Anyone passing through Edwardstown on South Road will be saying, "Yes!!! Much needed."

Also, grade separation roads enhance safety by minimizing the risk of accidents caused by conflicting traffic movements. Separating different modes of transportation, such as cars, pedestrians, and cyclists, reduces the likelihood of collisions and improves overall road safety for all users.

Additionally, grade separation roads enhance the reliability of transportation networks by reducing the impact of traffic delays due to congestion or accidents. This reliability is crucial for businesses, emergency services, and commuters who depend on efficient transportation systems for their daily activities.

A by-product of grade separation roads is that it can often lead to increased property values and economic development opportunities in surrounding areas, as improved transportation infrastructure attracts investment and stimulates economic growth.

Sounds like lots of benefits... we'll see if we can endure the work in progress time ahead.



The view down South Road - 2024
Bumper to Bumper



Sunset. Arrh... Beautiful!

Don't we all love a beautiful sunset. It does something positive to our soul.

We have just experienced the time when the sun sets in perfect alignment beneath the Brighton Jetty, in Adelaide (around 20th March). The alignment of the setting sun with the Brighton Jetty, is due to the phenomenon known as the "analemma." The analemma is a figure-eight-shaped curve that represents the Sun's position in the sky at the same time each day throughout the year. It's caused by the tilt of the Earth's axis (approximately 23.5 degrees) and its elliptical orbit around the Sun.

In Adelaide, the Sun's alignment with the Brighton Jetty occurs because of this specific combination of factors:

ØLatitude: Adelaide is located at a specific latitude on Earth. The analemma's shape depends on the observer's latitude, and at certain latitudes, such as Adelaide's, the Sun appears to follow a path in the sky that aligns with the jetty during certain times of the year.

ØSeasonal Variation: As the Earth orbits the Sun, the tilt of its axis causes the Sun to appear at different positions in the sky throughout the year. During specific times of the year, usually around the equinoxes, the Sun's path in the sky aligns with the east-west orientation of the Brighton Jetty, creating the picturesque sunset alignment.

This alignment typically occurs around the equinoxes (around March 20th and September 23rd), when the Sun sets due west along the east-west orientation of the jetty. The rest of the year, the Sun's position will deviate from this alignment.

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