

A Birds Eye View

The Reality Mesh

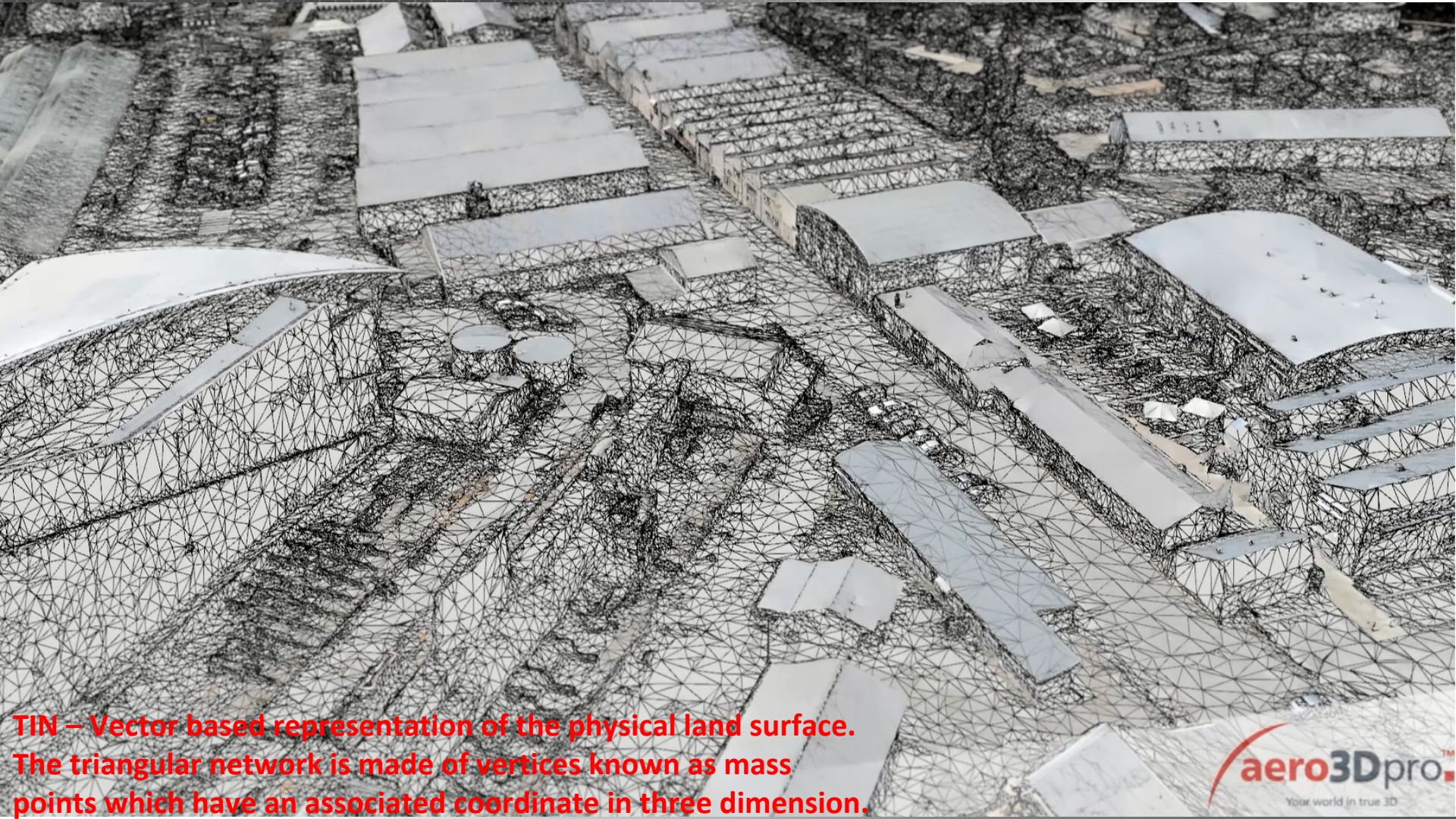
For Informed Decision Making, , Mining, Surveying,
Planning, Approvals and more

Presented by George Sioutis

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An Award Winning Product

- Award for Spatial Enablement: [AEROMetrex](#) and [Land Development Corporation](#), Review of Building Height and Design in the Alice Springs CBD
- Award for Innovation and Commercialisation: [AEROMetrex](#) and [Landgate](#)—aero3DPro-earthmine integrated solution
- Award for Environment and Sustainability: Onkaparinga Hills 3D Model
- Award for Spatial Enablement: Philadelphia project



**TIN – Vector based representation of the physical land surface.
The triangular network is made of vertices known as mass
points which have an associated coordinate in three dimension.**



The future

- A survey product that is also a visualisation tool
- Fully textured, geographically located 3D models
- Extremely rich 3D environment capturing all detail, not just features such as buildings
- Data that can be visualised in real-time
- Models that allow interactive analysis, measurement and manipulation

Your World in True 3D

The future

- Surveying results must meet certain specs.
- Certain areas require sub 1mm accuracy whereas others need 50mm accuracy.
- We are able to join Aero3D with terrestrial laser scanners, can be cost effective approach, which makes you more competitive.
- Its also a safety factor when it comes to high traffic areas like a highway.
- Here is a project we did with Fyfe.

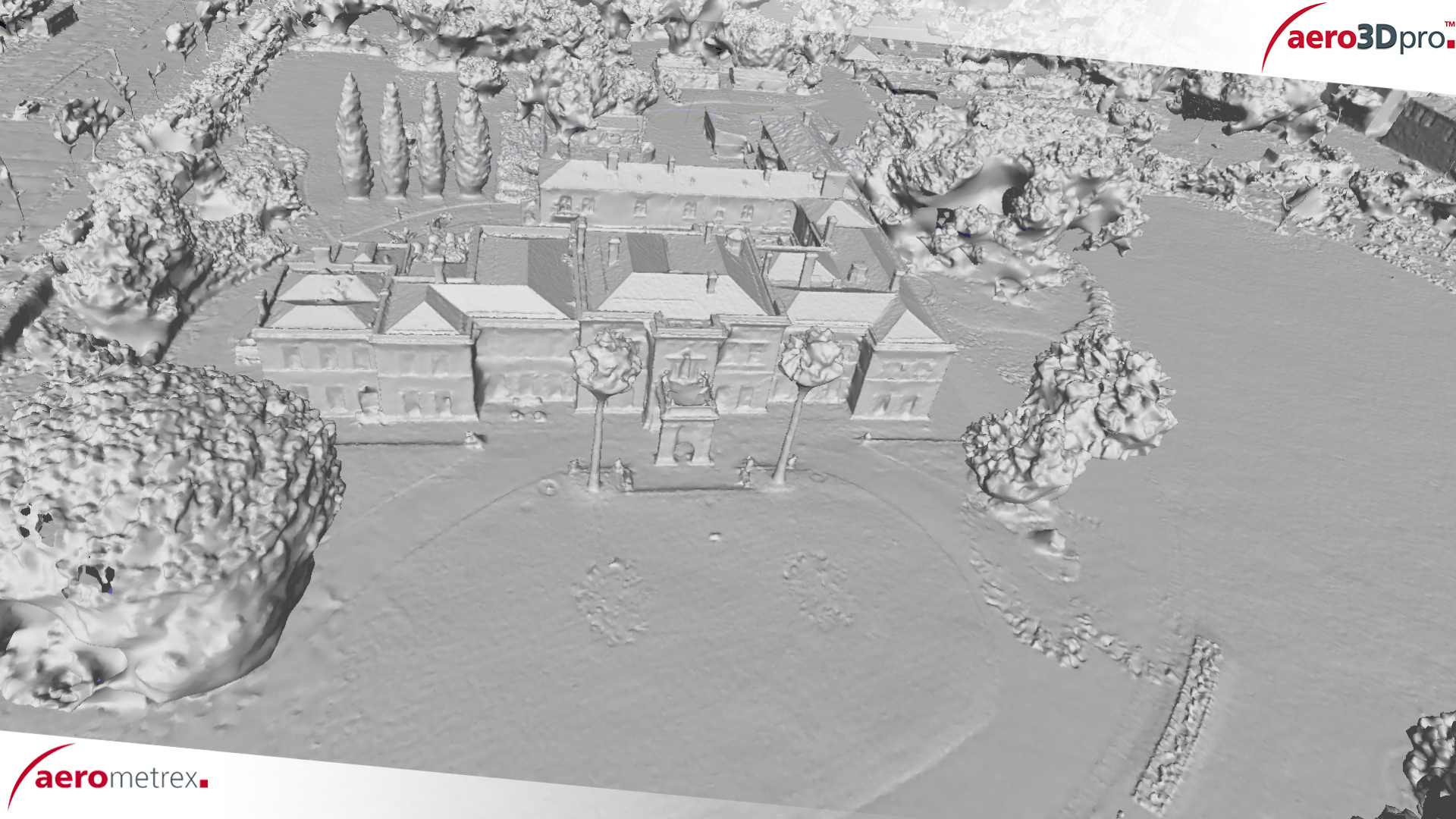


FYFE

Hopefully that has sparked your interest.

Presenting the world in 3D is nothing new.... is it?

- ▶ Let's take a look at some examples, lets see what else Aero3D can be used for.



How is it done?



HOW IS THIS DONE?

► In general terms

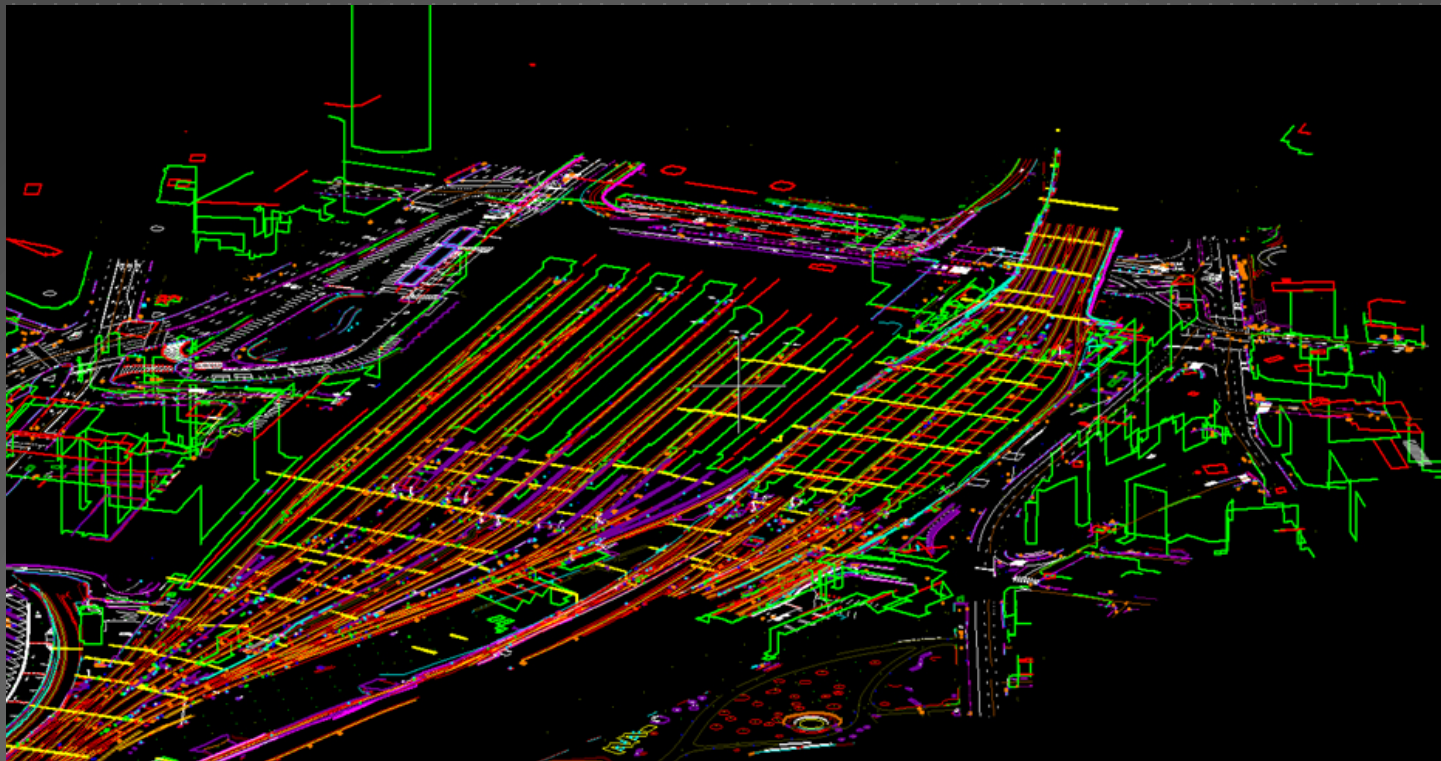
- It is a photogrammetric system – it is accurate
- It uses masses of oblique overlapping images
- Capture imagery is very high resolution, typically 2-3cm oblique imagery
- It can also incorporate imagery taken from other platforms including conventional vertical aerial, and street level imagery
- Very advanced algorithms to extract out detailed 3d information from the source imagery
- Automatically generated

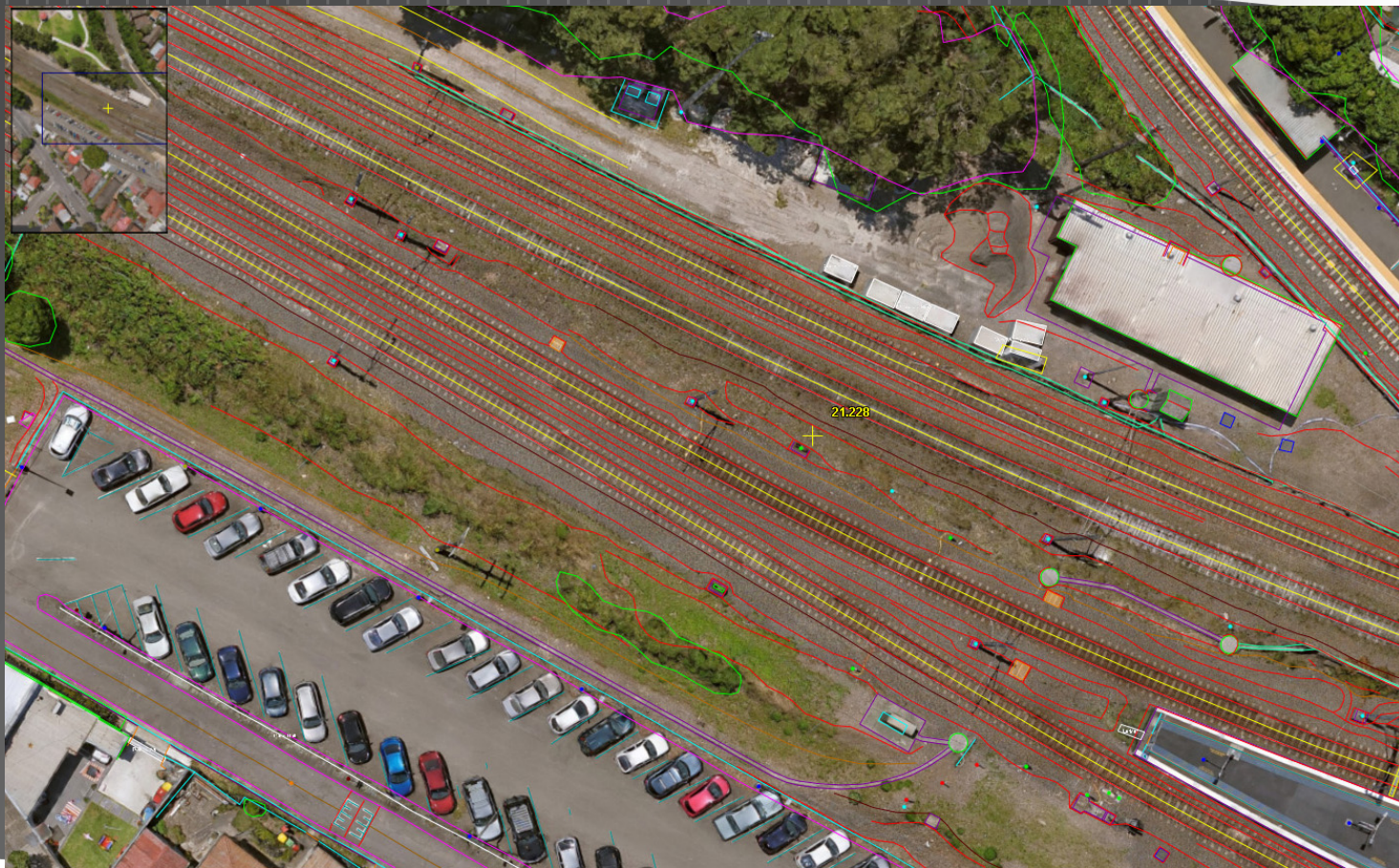
Surveying Applications

Site analysis
Stockpile Heights
Line of Sight

QUANTITATIVE VOLUME CHANGE ANALYSIS









Environmental Management

SAFETY

► In general terms

- Not many people want to put a terrestrial laser scanner under an area that is prone to land slides and erosion.
- Maybe access to an area is restricted
- This is where Aero3D can assist you

Town Planning

Built
Environmental
Financial



CITY OF SWAN

- ▶ Aero3D was used as a community consultation tool to get the plans through council and into development.
- ▶ The video shows the current area in 3D and it incorporates the future design.



Change Detection and Monitoring

3D CHANGE MONITORING

Aero3D in the International Stage

With 3D, the Sky is the Limit

Markets:

Mining and Resources
GIS
Engineering
Surveying
Real Estate
Planning
Disaster Management
Law Enforcement
Environment
Culture and Heritage

Applications:

Visualisation
Public consultation
Planning
3D GIS
Line of Sight
Simulation
Measurement
Volumes
Development
Shadow Studies
Flood mapping

Your World in 3D