

# Eliot Sinclair

surveyors | engineers | planners

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## 3D Laser Scanning Service



In today's world of renovation, construction, as-built and retrofit projects, 3D laser scanning solutions provide a cost effective and efficient method of gathering the positional parameters of structural, electrical and mechanical systems.

Our 3D laser service removes the need for your organisation to invest in laser scanning hardware and the man-hours required to capture and process the data. We come to your project, ascertain your requirements and deliverables, scan the physical area and deliver a fully registered point cloud for use in your design and detailing processes.

With renovation, retrofit and construction projects on the rise, knowing these results are a viable method for understanding and measuring the existing as built environment with its associated mechanical, electrical and plumbing (MEP) systems is a critical consideration to ensure the efficient and predictable delivery of a design project.

In many cases, older buildings may not have 2D or 3D design files to aid in the new construction and there is no certainty that any paper plans supplied are reliable to the extent required for the new design. Using the Eliot Sinclair scanning service is an efficient solution for the architect, construction contractor and project manager looking to tackle complex as-built and retrofit projects confident in the knowledge that they will be supplied with high integrating survey accurate data on which to base their designs and undertake construction.

### 3D laser scanning service deliverables

A fully registered point cloud (as needed). Registration of a point cloud ensures point clouds acquired from multiple scanner set up stations mesh accurately together.

An exported point cloud to a 3D modelling package of the client's choice suitable for visual inspection against any previously modelled components.

We can, if requested, produce a 3D model from the point cloud in the 3D modelling package of your choice to an agreed level of detail.

#### A bit of future wisdom

Laser scanning is an ongoing process throughout the life of the construction project, capable of constantly adjusting and updating the virtual model and providing a precise representation of the as-built project. At the end of construction when everything is installed and finished it is this updated model that becomes the valued as-built record to be utilised by the owner.