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3D Substation Design

Creating high quality designs, minimizing risks and improve safety.

Laser scan of existing equipment at Zillmere Substation



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New equipment added to Zillmere ring bus



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Model contains all meta-data for future asset management



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Zillmere substation refurbishment - project summary

- Laser scan provides accurate dimensional and locational data for existing equipment.
- The creation of an accurate 3D model is quicker and easier than re-drawing the substation from old TIF documents
- Installation of new model components provides a detailed model of the hybrid installation (hybrid of new plus old equipment), it is fast and accurate.
- Intelligent design provides automated BOM, it is fast and accurate.
- Once templates are created showing plans sections and elevations, any design changes required can be made to the model in a very short time, and all drawings are simply re-printed. No costly re-drafting, so design changes result in minimal rework, and design optimisation is easier.
- Future asset management benefits flow from the project by linking the model to your GIS database.
- Future replacement of the remaining 5 CBs and isolators will be quick and simple to design, as the model and library files are now available.
- This was only a primary design (layout) project. Had the secondary system design also been included this would have multiplied the benefits. The secondary design part of Bentley Substations has continuity checking, other logic checks and automated cable schedules, further increasing the benefits of intelligent design.
- It is time to move forward with intelligent design.

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https://www.youtube.com/watch?v=YpdNkmlgBxc

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