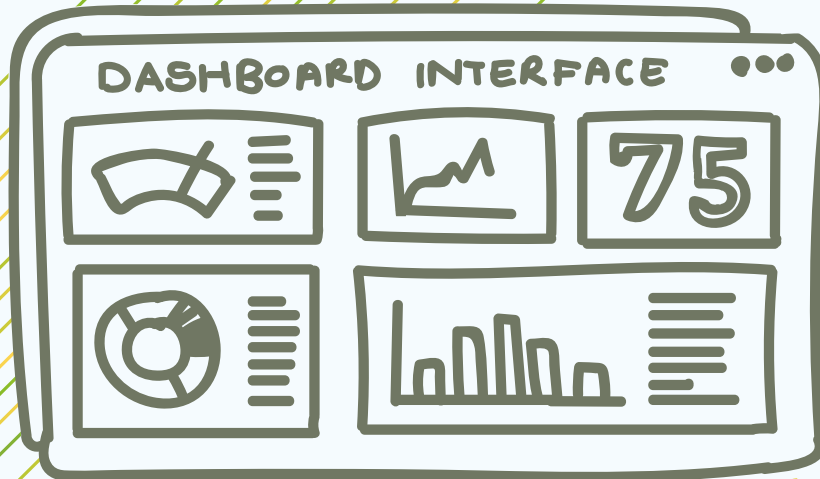


aurecon

*Bringing ideas
to life*



DOCUMENT
STATUS

PROJECT
DASHBOARDS

SPATIAL
DASHBOARDS

The Digital Engine

Adding power steering

New generation engine

This story is not of the vehicle that might journey along the completed WestConnex New M5, it's the vehicle steering the engineering design for one of Australia's largest integrated transport projects.

But like the design of any new generation vehicle it was functionality, performance and a smattering of passion that drove the development of the Digital Engine for WestConnex New M5.

The Digital Engine developed by Aurecon is a collaboration portal that houses engineering designs, documents, and cost and performance tracking for design approvals.

"This is not traditional document management. This is throwing off the shackles of software constraints and using digital engineering to power a live document management and control system to design a mega project," says Troy Burton, Major Projects Director, Aurecon.

The next is WestConnex

WestConnex is the next critical road infrastructure project for Sydney, Australia. Aurecon, with design partner Jacobs, is engaged in a design and construct (D&C) joint venture project for design of the WestConnex New M5.

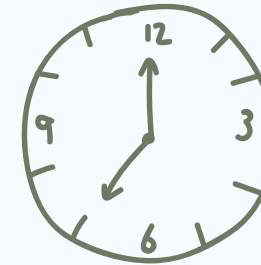
The project will double the capacity of the heavily congested, existing M5 East motorway corridor by providing new 9 km long twin tunnels from Kingsgrove to a new interchange at St Peters. It's all part of the NSW Government's integrated transport plan to support Sydney's growth. The project is expected to be open to traffic in early 2020.



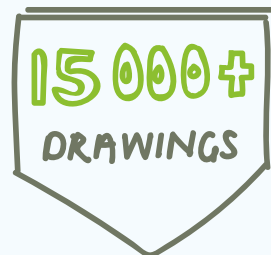
250
DESIGN
PACKAGES



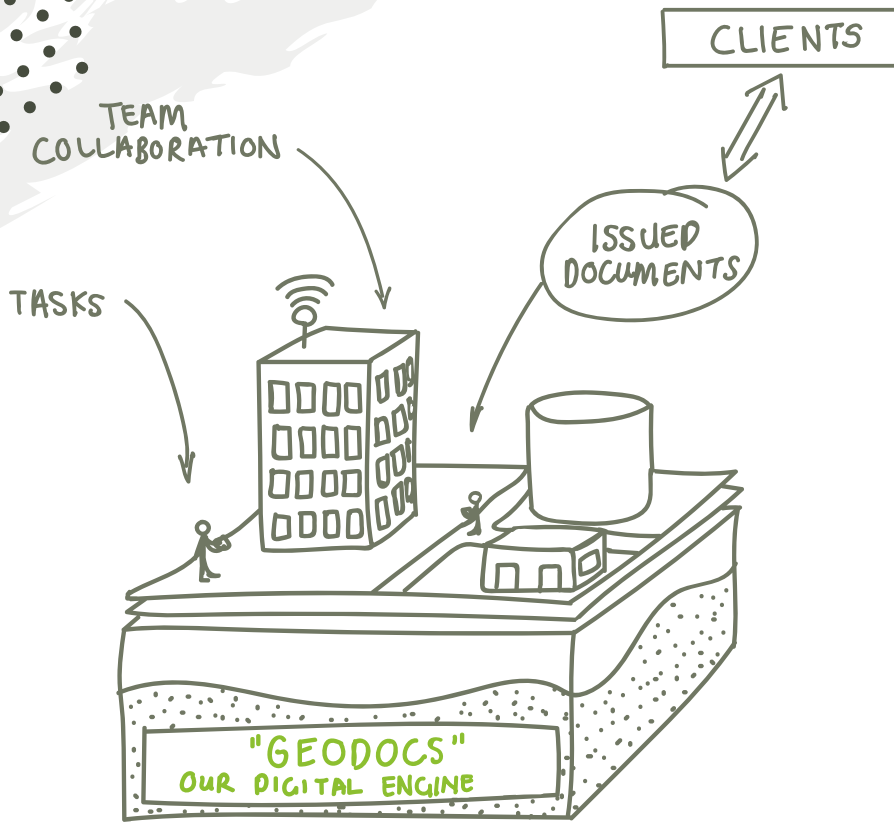
20
MONTHS



500 000
DESIGN HOURS



15 000+
DRAWINGS



If you were building an engine...

With a traditional document management system no longer suitable, a new solution had to be rolled off the production line. In this case the production line was Aurecon's digital engineering team, challenged to build a document control system, the Digital Engine, to support engineering design of WestConnex New M5.

The GeoDocs platform was chosen because of its ability to manage and track documents. Aurecon's digital engineering team then customised GeoDocs to be the digital engine for WestConnex New M5.

The workflows and processes have been specially set up to meet the needs of the project. It standardises collaboration using the BS 1192 standard framework to deliver automated data flows and information management.

The GeoDocs platform tracks where the documents are in the approvals process, who they're assigned to for review, what hold ups there are in the review process and how far along they should be before issuing for construction.

The associated registers are monitored and tracked for the life of the project, creating full assurance and auditability of document verification.

*We're not far off from being able to scale this Digital Engine solution to any project of any size and any complexity, **Troy Burton**, Major Projects Director, Aurecon*

Checking the engine

Aurecon hosts the Digital Check Room within a portal, allowing access to internal reviewers, client reviewers and independent reviewers globally, creating true and real-time information collaboration.

This solution has resulted in innovative processes and workflows within the system, now developed and implemented, which could become the basis of future D&C projects.

The legacy of an auditable process for every project approval and stage is a robust and secure system to be used for projects to come.

“The beauty of the Digital Check Room is that reviewers can easily view their work flow tasks, when documents will be ready for review, or where the documents are in the review process.

“It has enabled the design team to streamline engineering design, saving the hassle that comes with managing documents in a traditional document management system,” says Ross Hall, Major Projects Commercial Manager, Aurecon

THE DIGITAL ENGINE



EVERY WEEK

500
DRAWINGS

12-15
DESIGN
PACKAGES

When performance hits the road

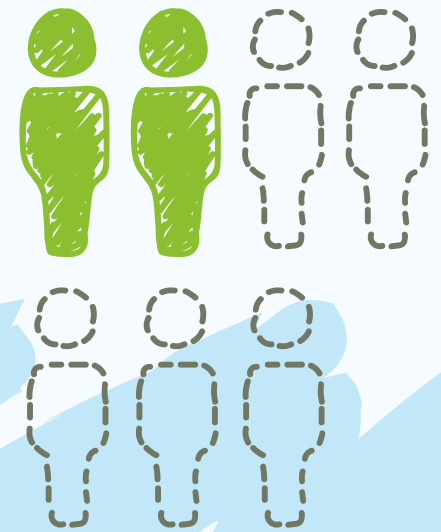
The Digital Engine is an innovative solution and has taken document control management to the next level. It is impressive to see how the processes were streamlined and all project deliverables are planned in detail. The performance of the Digital Engine is astounding and is impressing reviewers and stakeholders.

Aurecon in joint venture with Jacobs has been delivering design packages every week. This means the Digital Engine on WestConnex New M5 is fuelling the storage, review, approval and management of a huge number of design packages (drawings, requests, specifications) every week.

Driving efficiency

A project of this scale would normally have between five and seven Document Control Coordinators. Only two Document Control Coordinators are employed on WestConnex New M5.

It's the efficiency of the Digital Engine to digitally push documents through the review, approval and issuing stages that reduces the document management time spent by project staff. The system puts value on the ability to manage, sort and respond to documents in a timely fashion.

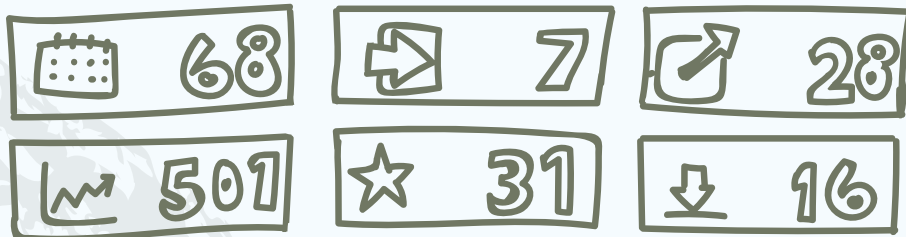


Real time data

At any point in the day the Project Director could access the Digital Engine dashboard to determine the status of design packages and individual documents. Is it with the client for review? Is there a stakeholder comment that needs to be addressed?

The project team could then address the holding points, go in, clear them, then get the document moving through to final design and issuing for construction. The efficiency and power of the Digital Engine is allowing Aurecon and Jacobs to deliver the mega project WestConnex New M5 for the people of Sydney.

DASHBOARD - WEEKLY PROGRESS



About Aurecon

Aurecon brings ideas to life to design a better future. Imagining what is possible, we turn problems into solutions.

Aurecon offices are located in:

Australia, China, Hong Kong, Indonesia, Macau, New Zealand, Philippines, Qatar, Singapore, Thailand, United Arab Emirates, Vietnam.

For more information please visit
www.aurecongroup.com

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