



Explore Manufacturing

Centre of Excellence for Modern Construction

DIGITAL DESIGN & DETAILING, STANDARDISATION AND AUTOMATION

JAMES TURNER – DIGITAL LEADER

LAING O'ROURKE

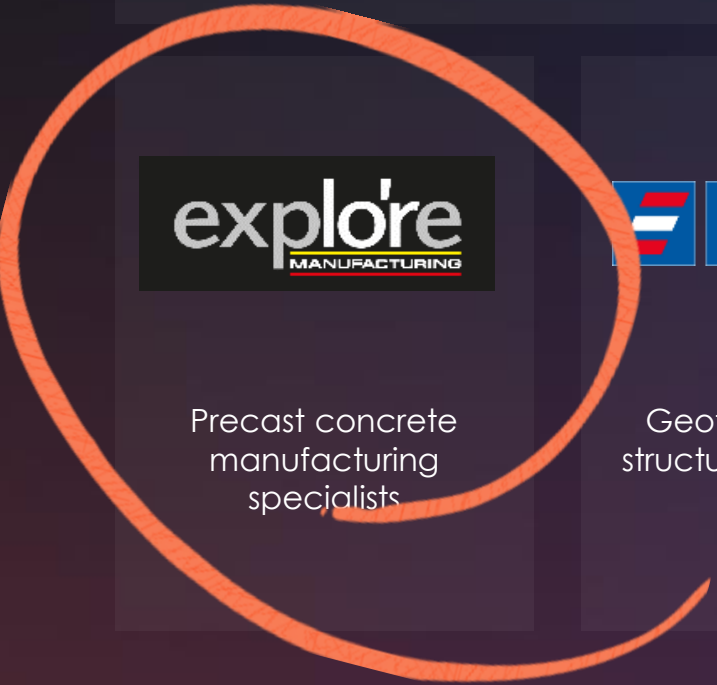
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A NEW DELIVERY PARADIGM

VERTICAL INTEGRATION

Specialist Trading Business

LAING O'ROURKE



explore
MANUFACTURING

Precast concrete
manufacturing
specialists

 **expanded**

Geotech, civil and
structural engineering



Crown House

MEP specialists.
Offsite manufacture,
onsite installation



Select

Crane, plant and site
accommodation
solutions



Vetter

Specialist stone, facade
and hard landscaping

A FORMULA FOR CERTAINTY

Engineering success, every time



EXPLORE PARK

Nottinghamshire



WHAT WE DELIVER

Explore Manufacturing



Structure



Facades



Infrastructure

HOW WE DELIVER

Explore Manufacturing



Provide Digital Certainty



Utilisation of Technology



Longterm Multiskilled Workforce



Controlled Working Environment

EXPLORE MANUFACTURE

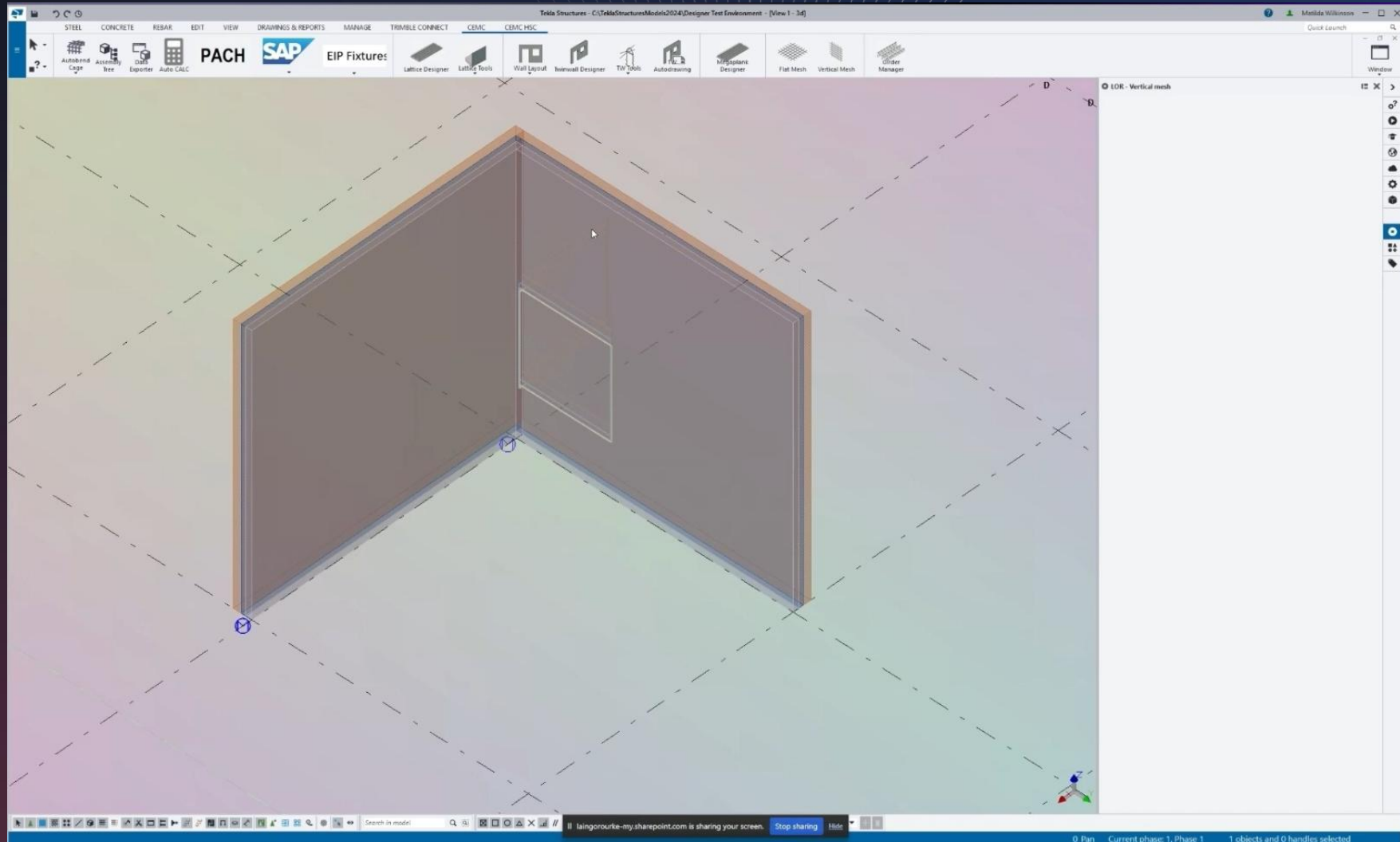
3D Modelling and Detailing



Digitally Enabled Design
3D Modelling

EXPLORE MANUFACTURE

Automated RC Detailing



ENGINEERED SAFETY



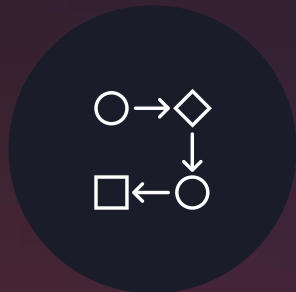
ENGINEERED SAFETY OBJECTIVES



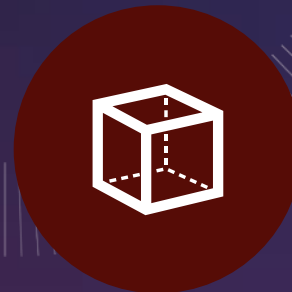
Risk is managed **holistically** across product lifecycle.



Engagement - Internally, collective insights become the norm and everyone has a voice. Externally, CEMC requirements and best practices are understood.



Digitalised design and control processes



Inherently safer manufacture and assembly via **Product Led Design**.

MANUFACTURING SIMULATIONS

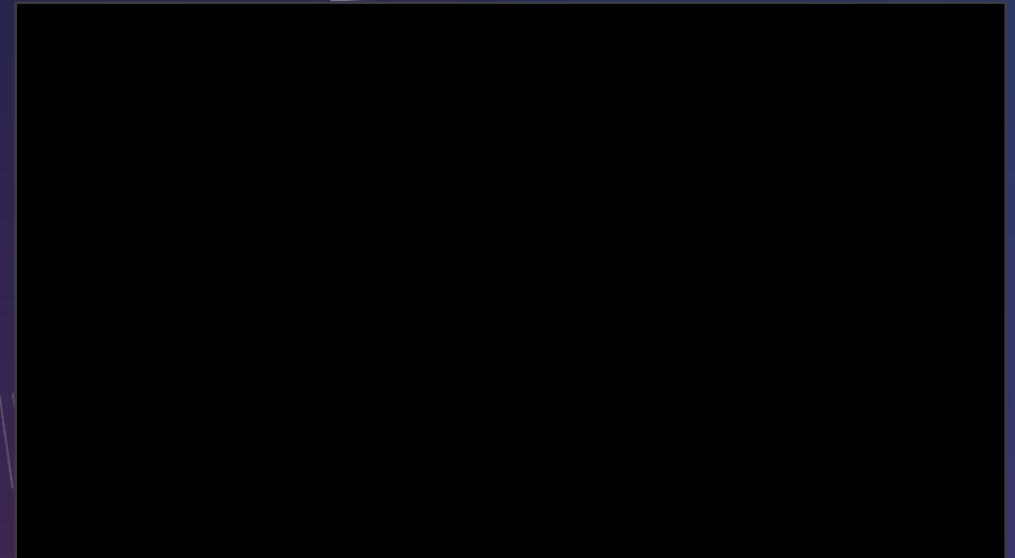


- High engagement, fast iteration
- Value from the process not the output
- ~ 2 - 3 weeks per product simulation

MANUFACTURING SIMULATIONS



Diaphragm Beam

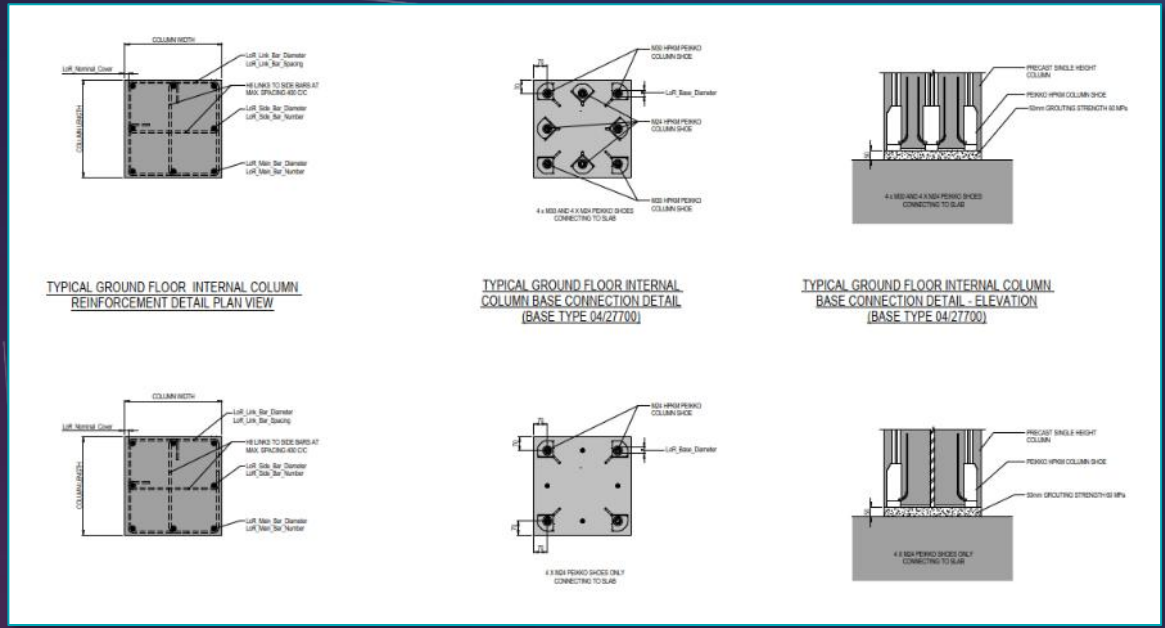
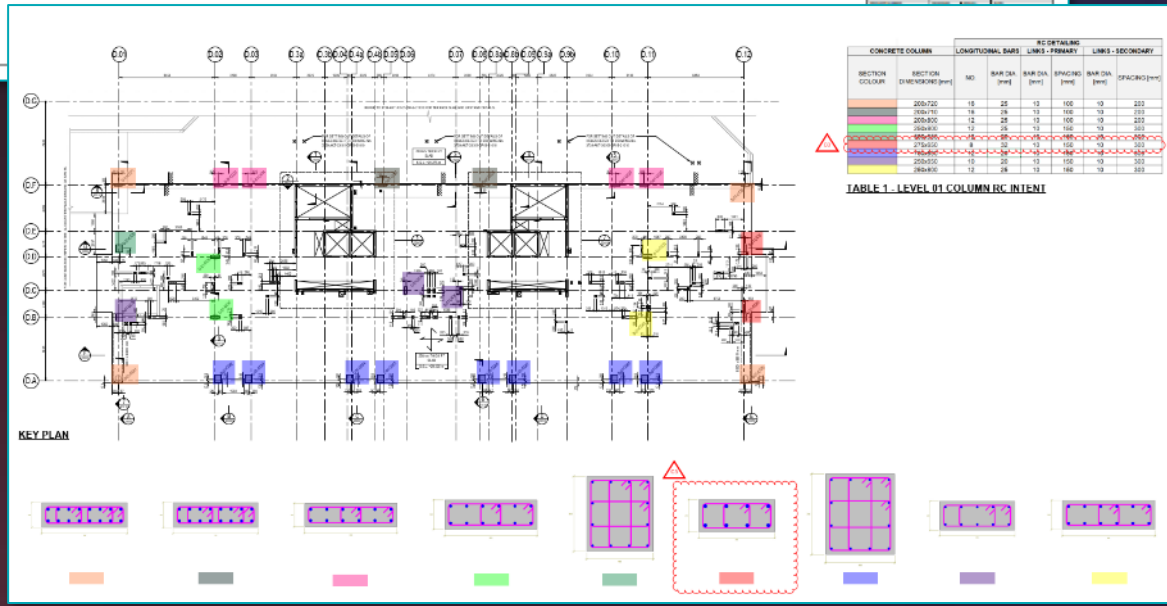
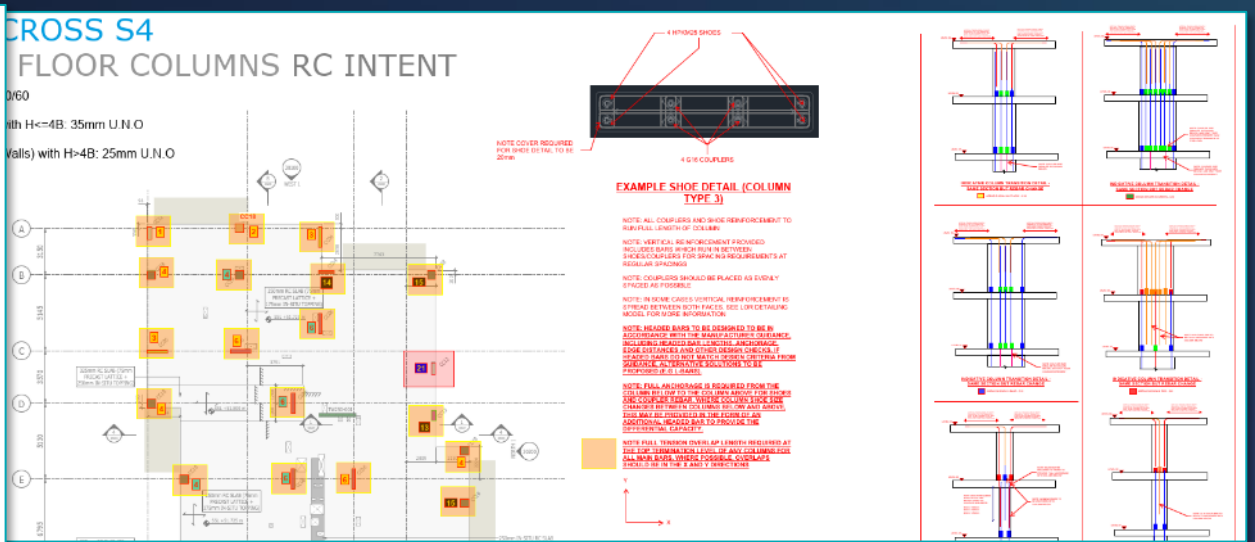


GGU – Pad Foundation Trial

MANUFACTURING SIMULATIONS

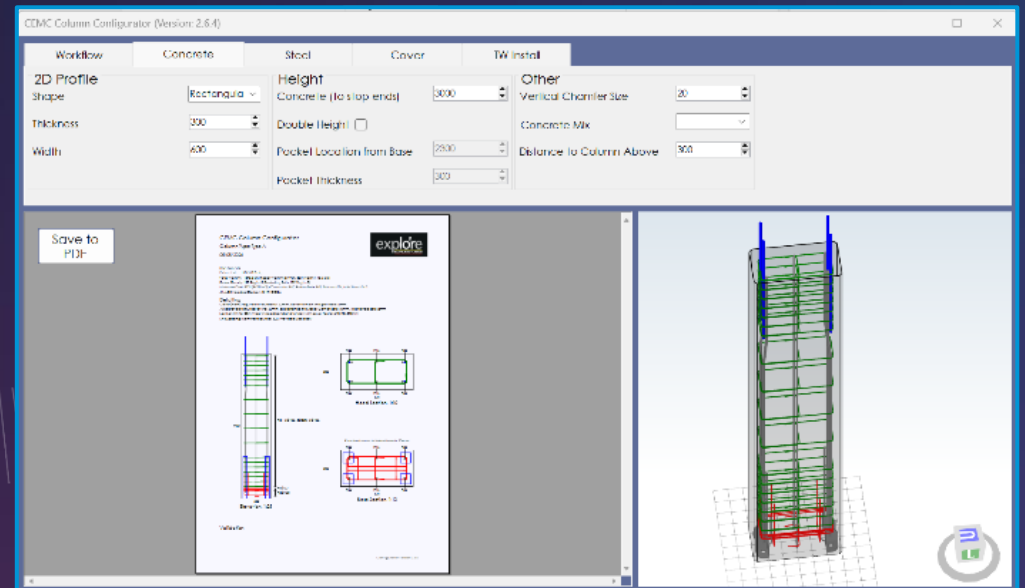
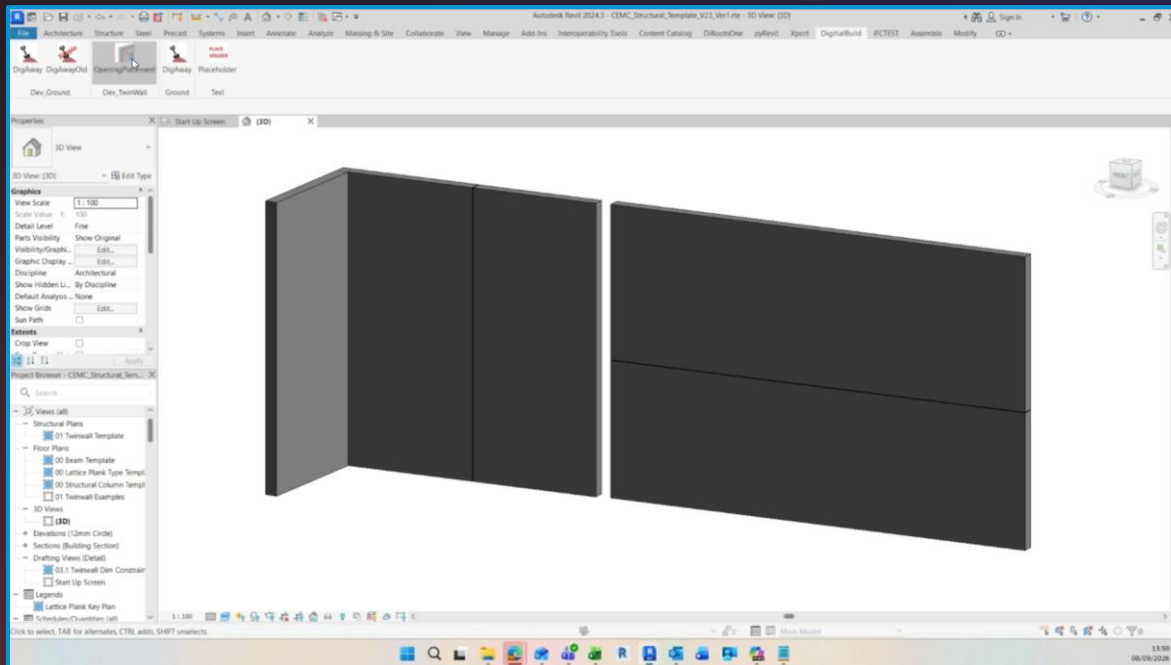


Digitally Enabled Design
Manufacturing Sequence



PRODUCT CONFIGURATORS & DESIGN AUTOMATION

Driving a **product-led approach** for better efficiency and quality through the design process and certainty in production.



COLUMN CONFIGURATOR EXAMPLE

LAING O'ROURKE

CEMC Automated Detailing: Column Configurator

LAING O'ROURKE

Thank you

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