

Blavatnik School of Government, Oxford, United Kingdom



LAING O'ROURKE

COMMISSIONED BY OXFORD UNIVERSITY, THE NEW BUILDING WILL PROVIDE A FACILITY TO TRAIN FUTURE WORLD LEADERS.

CADS were involved in 2 ways in this ambitious and iconic project: supplying detailing services to Laing O'Rourke and as the UK supplier of the structural analysis software, SCIA Engineer, to Pell Frischmann.

CADS DETAILING SERVICE

"CADS were appointed to detail the 3 cores and all shear walls for the project. All the drawings were prepared from design intent issued by Pell Frischmann. The quality of the CADS detailing and bar schedules were of a high standard from first issue which gave the designers and site confidence in their abilities and enabled us to focus heavily on the more complex details. This ensured that the steel fixers could concentrate on fixing quality rather than making the fixers take the "that's the best we can do" approach. We would definitely use CADS again."

Tim Rowe,

Project Manager, Laing O'Rourke

SCIA ENGINEER SOFTWARE:

The structure has an intricate geometry that consists of a series of stacked toroids which are offset, on plan, from floor to floor resulting in set-backs and cantilevers to the external elevation and to the inside face of the forum. Due to the complex interaction of structural members SCIA

Engineer software was used to create an FE design model to analyse the building as a whole including code dependent long-term deflections. SCIA Engineer software proved to be very flexible as geometry and loads for pre-stressed slabs were imported to simulate tendon forces. The Construction Stages module was used to assess temporary supports allowing for more accurate prediction of long term deflections.

ABOUT CADS RC DETAILING SERVICES

CADS has established an enviable reputation for providing expert RC detailing services to Consulting Engineers, RC Frame Contractors and Rebar Fabricators in the UK, UAE and North America. CADS uses its own market leading CADS RC and RebarCAD software to detail more than 2000 drawings per month. With a large team of experienced detailers CADS has a unique capability to meet urgent project deadlines without compromising drawing presentation or technical accuracy! CADS RC bar bending schedules can be shared electronically to facilitate integration with rebar production software and machinery.

Established in 1974, CADS is a leading software developer with 6000+ Civil and Structural Engineering customers in 90+ countries.

ABOUT SCIA ENGINEER

SCIA Engineer is a leading FE structural analysis software used to design all kinds of structures to UK, EC and International building codes. SCIA Engineer perfectly plugs into BIM workflows via a seamless link to Revit, developed and sold by CADS.

CONTRACTOR & CADS CLIENT:

Laing O'Rourke

OWNER:

Oxford University

LOCATION:

Oxford, UK

CONSTRUCTION PERIOD:

September 2013 to November 2015

NUMBER OF DRAWINGS:

28 AI RC details and BBS

AWARDS WON:

RIBA National Award 2016

Stirling Prize Shortlist 2016

