

Description

- ◆ Matheson House in Telford, Shropshire is a £11m refurbishment of a 5 storey, 14,000m² UK Government property PFI asset.
- ◆ HM Revenue and Customs (HMRC) contracted Capgemini, an international technology, consulting and outsourcing business to provide to deliver the HMRC function from this site.
- ◆ SDS were employed by Capgemini to carry out the building services refurbishment design up to RIBA Stage 3.

Involvement

- ◆ Complete site Condition survey to establish the extent and condition of the existing electrical and mechanical services installation.
- ◆ Prepare performance design and specification for the full refurbishment of the building engineering mechanical & electrical services, including replacement of life expired plant and services.
- ◆ Extensive thermal modelling was necessary to establish an assisted natural ventilation and mixed mode scheme, taking into account the buildings thermal mass.



Benefits Delivered

- ◆ Fast-track turnaround of design deliverables to meet challenging design programme.
- ◆ Identify the optimum solution in terms of through life costs vs. initial capital investment to meet tight project budgets pinpointing the design features and solutions that consumed less energy, and produced less CO₂ within the available budget.
- ◆ With our experience of low energy modelling, a non-cooled solution was achieved, counteracting the reasonably high heat gains.
- ◆ Existing natural gas boilers were provided, serving perimeter heaters with enhanced zonal controls.
- ◆ Ventilation was a hybrid system with mixed mode components based on Gilberts 'Mistrale' units. Air conditioning options were explored as an alternative for perimeter encased VRF units.
- ◆ Lighting provision was through LED, daylight dimming organic response fittings
- ◆ Worked loosely with the interior designer in the final arrangement to create modern office arrangement for agile working.



£11m refurbishment for the HMRC's Matheson House offices through the outsourcing group Capgemini