

# Building R80

IMAT external beamline facility, Harwell, Oxfordshire

Industrial

Research & Development



## Light at the End of the Tunnel

A phased 2-storey extension to Building R80, to provide a new IMAT external beamline facility used as a neutron imaging and diffraction instrument for material science, materials processing and engineering by ISIS research.

**Phase 1:** The design and construction of a 415sqm 2-storey extension to Building R80 to serve as an experiment building housing the IMAT experimental equipment and plant with an attached pump enclosure and covered way creating a new entrance lobby to R80.

The building is fully M&E serviced with AHU's, new pumpset and pipework from boiler plant room, BMS controls and a two hook 10 tonne/2 tonne crane; electrical installation included sub-mains distribution, supplies to mechanical plant, small power and lighting, emergency lighting, data/communications, public address, fire alarm installation, lightning protection and card swipe access system.

**Phase 2:** The design and installation of a mezzanine flooring system complete with access staircases and the design and construction of a User Office and Counting House complete with small power and lighting. The Phase 2 works couldn't be commenced until the Completion of the installation of IMAT plant and equipment by others.

## Project Details

- **Scope**  
2 phase, 2 storey 415sqm extension to research building
- **Role**  
Architect, Lead Designer, employed by Design & Build Contractor
- **Client**  
Rutherford Appleton Laboratory/STFC
- **Contractor**  
Stepnell
- **Contract**  
NEC3 Design & Build
- **Value**  
£1.6m
- **Dates**  
Completed February 2014



## Key Aspects

- Working within tight building level tolerances due to accuracy required by IMAT equipment
- Full overhead gantry crane coverage
- Roller shutter door access from service yard to allow full forklift and vehicle access to experimental area
- Interfacing and integrating with existing Building R80 which remained in operation during works
- Phased construction programme to allow IMAT equipment to be supplied and installed by others



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