

University of Warwick – Modern Archive Store



COMPLETED PROJECT



DEMOLITION



EXCAVATIONS

Key Details

Client: University of Warwick

Sector: Educational

Location: Wellesbourne Campus

Principal Designer: Dobson Grey

Principal Contractor: Chiel Construction

Contract Sum: £1,887,683.89

Contract: JCT Design and Build 2016 Edition

Contract period: 28 weeks

Procurement Route: Competitive Tender



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INSTALLATION OF INSULATED ROOF CLADDING



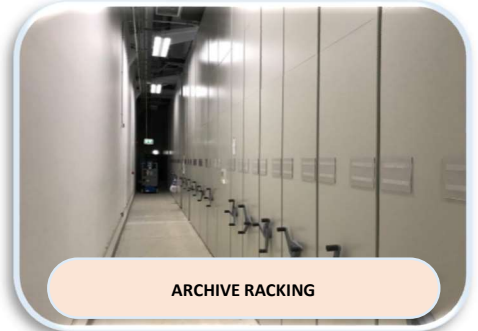
MASONRY



VCL, DRY LINING & MECHANICAL INSTALL



CONCRETE CLADDING FAÇADE



ARCHIVE RACKING

Full design and build project for the conversion of an existing concrete portal frame barn into a modern archive store with an airtightness requirement of $3.00\text{m}^3.\text{h}^{-1}.\text{m}^2@50\text{Pa}$, a fire integrity of 4hrs and be carbon neutral.

Project Restraints:

- Working alongside the ecologist to manage a potential risk of bats and a discovery of newts.
- Addressing carbonation corrosion to the existing concrete portal frame
- Developing the change in ground levels to adapt the project.
- No local drainage

Social Values:

- We worked closely with the local nursery on the campus grounds. The Nursery were escorted close to site to see some of the construction works and diggers in operation.
- We provided construction pictures for colouring.
- A donation of toy ride on diggers were given to the nursery.

Project Scope:

- Excavate and form level to accommodate the build before during and after.
- Install new services ways.
- Protect existing concrete frame from carbonation.
- Cast new concrete and screed floors.
- Construct new walls from brick block, Metsec, concrete cladding.
- New cladding roof and gutters
- Installation of drop fire shutters
- Electrical: New mains supply to the building, Electrical distribution, electric heating system, new comms room and data installation, LED lighting, Mechanical wiring, new FA system with wireless link to the central system.
- Mechanical: Installation of HRU system, Installation of dehumidifier system, Installation of DX System, Supply of new water main, Distribution of MCWS and waste system, Installation of fire damper system, Installation of brand new BMS system with wireless link,
- Full BIM Requirements
- Air permeability score achieved: $1.60\text{m}^3.\text{h}^{-1}.\text{m}^2@50\text{Pa}$.