



LeeMcCullough
Consulting Engineers

Project 3884: Community - Renovation

Clane Parish Centre

Client: Clane RC Parish

Architects: Paul Arnold

Value: €980k (2009)

LeeMcCullough team:
Lorcan O'Flannery

Project scope:

- *Conservation Engineering*
- *Civil + Structural Design*

Historical Renovation

At LeeMcCullough we have exceptional experience of revitalising existing buildings, which is often more complex than the structural engineering of new buildings.

Over many projects we have addressed and resolved a wide range of issues, including:

- Strengthening historical joists and beams to carry increased loading
- Masonry Decay/Delamination
- Threading modern services into old structures

At LeeMcCullough we always seek to identify and resolve issues early, innovatively address demanding building difficulties and deliver our solutions on time and cost efficiently.

When it comes to renovation and refurbishment, anticipating and resolving engineering issues effectively is the key to a successful outcome.



Geotechnical Engineering protects Archaeology

Project in brief

The Parish Centre comprises the former Presentation Convent and National School - built in the 1830s - nestled between the ancient abbey and neo-gothic church on busy Main Street.

Our brief included the inspection of these protected structures; design of appropriate remedial works; design of sensitive structural modifications to facilitate change of use; and design of extensive car parking and landscape features.

The groundworks were complicated by a combination of very poor ground and archaeological remains. This necessitated careful geophysical analysis and ground stabilisation.

Key features

Structural design

Modifications of Protected Structures to suit the new architectural layout

Remedial work to Protected Structures to consolidate the structural fabric and ensure stability

Drainage design

Stormwater drainage from the church, convent and school was renovated, and joined by a network of slot drains in the car park and landscaped areas for attenuation at shallow depth to minimise its impact

Ground Stabilisation

The need to minimise excavation to avoid disturbing archaeological remains prompted the use of geogrid soil stabilisation. The bearing strata were analysed using Dynamic Cone Penetrometer tests, and the geogrid was carefully designed to provide adequate support for the anticipated traffic.

