



Palladian Mansion upgrades its nosebags

Project in brief

Castletown House is the largest and most significant Palladian style country house in Ireland. This imposing mansion was built in 1722 using the architectural designs of Alessandro Galilei, Sir Edward Lovett Pearce and Sir William Chambers.

The ancillary Home Farm is a cluster of agricultural buildings of great historic interest, and the demesne grounds are a prime attraction for tourists and locals alike.

Our initial brief was to visually inspect a range of designated structures within the demesne and report on their structural condition (listing structural defects and probable causes, and assessing safe floor loadings etc.).



We also provided full structural engineering services for the renovation of the East Wing (former Stables) as a prestigious function centre, and the development of the Home Farm into a visitor centre with restaurant and retail facilities.

Key features

Structural design

- Modification of East Wing to suit the new architectural layout, including a two storey curved glazed link structure and lift access
- Modification of Home Farm, including strengthened floors, a two storey over basement RC link building and lift access

Drainage design

- Extensive landscaped areas at the East Wing and Home Farm with attenuated stormwater and sustainable drainage systems to minimise the impact on the natural environment

Structural survey

- East Wing (former Stables), Home Farm including Brewer's House, Cow Shed, Piggeries, Bull Pen and Dovecote



LeeMcCullough
Consulting Engineers

Project 3855: Monument - Renovation

Castletown House

Client: Office of Public Works

Architects: Paul Arnold

Value: €4.5m (2011)

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.