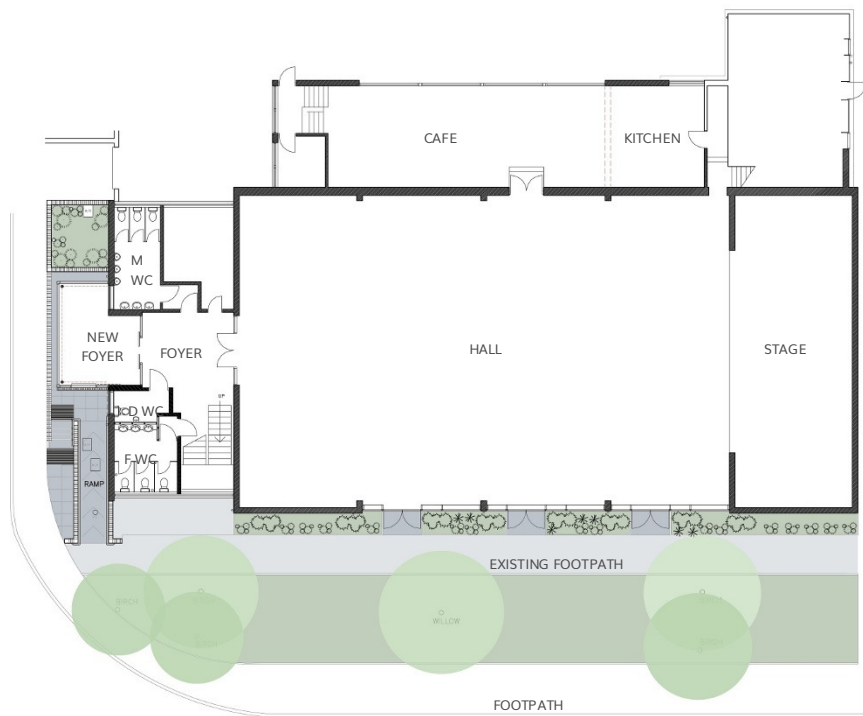




CASE STUDY: COMMUNITY  
CONNAH'S QUAY CIVIC HALL





GROUND FLOOR PLAN







## Sustainability Strategy

A 'Fabric First' approach was undertaken to improving the overall energy performance of the Civic Hall, with improvements to the thermal performance of the external walls, windows and roof. Further measures were introduced to minimise resource usage through the operation of the building. Daylighting levels were improved to reduce reliance on artificial lighting, PIR occupancy sensors were fitted to the toilet areas to reduce electricity consumption and water efficiency methods were introduced to the toilets and sinks.

The environmental impact of the improvements was minimised by choosing highly sustainable materials. The natural wood-fibre external insulation was made from waste softwood, a lime/cement render was specified to provide a weatherproof breathable finish, and high performance mineral fibre insulation was used for the cavity infill and roof improvements.

The improvements resulted in an improvement of the EPC rating from an 'F' rating to a 'C.'

## Sustainability Overview

- Single glazed windows replaced with double glazing
- Insulating the walls with external insulation where solid brickwork, and with cavity fill where there are cavities. Doubling the thickness of insulation on the main roof by adding highly efficient roof cladding, and adding 150mm of insulation to the previously un-insulated flat roofs.
- Fitting thermostatic radiator valves and fitting efficient new fan connector heaters to the main hall
- Installing energy and water saving taps and valves to basins and dual flush toilets
- Fitting occupancy controlled energy efficient PIR lighting fitted to toilets and a new efficient control system to the main hall ventilation system

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# CASE STUDY: COMMUNITY

## CONNAH'S QUAY CIVIC HALL

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**Name of Building**

Connah's Quay Civic Hall

**Date Completed**

July 2010

**Project Cost**

£295,000

**Building Type**

Leisure

**Location**

Connah's Quay, Flintshire

**Client**

Connah's Quay Town Council

**Main Contractor**

Carroll Builders and Contractors

**Environmental Performance**

Improved EPC Rating from 'F' to 'C'

**Awards**

Green Apple Award 2011 for the Built Environment and Architectural Heritage, National Bronze Award

Action for Market Towns Awards 2011, Welsh Zone, Commended in the Environment and Culture Category

**Building Overview**

The Civic Hall in Connah's Quay is a popular venue for a wide variety of entertainment, leisure and fund-raising activities, as well as business and family functions. Built in the 1960's, the external appearance of the building was characteristic of public buildings of that era, with a cantilevered concrete entrance canopy, red multi-rustic brick, low pitched roof and steel framed windows. The brief provided by Connah's Quay Town Council was to improve the energy efficiency, appearance and accessibility of the Civic Hall to the maximum level reasonably achievable using materials chosen for their low environmental impact.

The improvements included work to the Main Entrance, with the removal of the existing projecting concrete canopy and the construction of a new glazed entrance lobby. Accessibility of the building was improved with a new ramped access, and introduction of a draught lobby helped to reduce heat loss from the entrance hall. This also helped to improve daylight penetration into the building, reducing the dependence on artificial lighting.

The energy efficiency of the building fabric was improved by applying an insulated render system to the areas of solid wall construction. This improved the U-values to a current Building Regulations standard and has transformed and modernised the elevations of the building. The areas of cavity wall and the roof were also treated to increased levels of insulation and the existing single glazed window units were replaced with high performance double glazed units to ensure efficiency throughout the whole of the building fabric. The full height single glazed wall to the main hall was replaced with new high performance double glazed curtain walling. Tinted glazing was specified to control glare and timber panels were introduced at a high level to reduce the amount of glazing.

