

Name of Project
New Accommodation Project, Cheltenham

Client
GCHQ

Service Requirement
Office, computer and non-core services

Concession Award
2000

Funding requirement
£428 million

Equity Providers
Carillion, Group 4 Falck, BT

Architect
Gensler

M&E Services
Crown House Engineering

Main Contractor
Carillion Building



The project comprises the design, construction and management of the new Government Communications Headquarters (GCHQ) building, including the provision of a comprehensive range of support services over a thirty-year period.

We delivered

- The £350m four-storey building encompasses 100,000 sq m of floor space, equivalent to 17 football fields
- Four separate support buildings house a visitor reception centre with training and conference facilities, logistics centre, and power supplies
- The huge computer hall is the size of the Royal Albert Hall and housed beneath the central open courtyard
- Many sustainable features designed to save energy, including passive solar and heat recovery systems
- Innovative 'doughnut' shape gives optimum level of security

On-time completion was critical to the project's success, so we significantly shortened the construction period by designing the building frame around modular M&E components such as risers, heat exchanges and pump circuits. These components were fabricated off-site while the frame was being constructed, then brought to site and craned into place through pre-designed openings. This brought massive programme savings and greater certainty of completion.

The building needs to be extremely flexible to enable the client to change team structures on a rapid basis when necessary. Our solution was to house all the power and IT beneath flexible floors and by having a generic furniture layout this allowed new team areas to be set up overnight with a minimum of effort. The introduction of a common 'desk top' computer system and 'hunt me' phone system means staff can operate from any desk in the building.

The project was completed ten weeks early, meeting all of the client's criteria for high levels of security, flexibility, and state of the art, resilient IT systems. It has achieved a "Very Good" rating on the BREEAM sustainability index. Carillion now remains responsible for all major components for the next 30 years, retaining a team on site to replace components as their lifecycle finishes.