

## Project Overview

### Programme Duration:

30 Weeks

### Scope:

- Licensed and non-licensed asbestos removal
- Demolition of 1970s canteen block
- Demolition of 1970s computer building
- Full internal soft strip back to shell
- Works within and adjacent to **Surrey County Hall (Grade II listed)**

## Case Study: Kingston upon Thames - Surrey County Hall

Shorts Group was appointed to deliver a **complex demolition and asbestos removal project** at Surrey County Hall, Kingston upon Thames. The works involved demolition of two 1970s-era ancillary buildings alongside a **full internal soft strip of the main County Hall building**, which is **Grade II listed**.

The project was technically challenging due to the **structural connection of the computer building to the listed building at both ends**, combined with unknown structural conditions uncovered following possession of the site.



## Key Challenges

### 1. Demolition Adjacent to a Grade II Listed Building

The computer building was physically tied into the listed County Hall structure at either end, requiring careful separation and protection to prevent damage during demolition works.

### 2. Unforeseen Structural Conditions

Following soft strip and intrusive pre-demolition inspections, several critical issues were identified:

- Concrete cladding panels could not be crane-lifted due to **grouted-in lifting eyes**
- The building was found to have **no first-floor columns**
- Structural investigations confirmed the building was an **underslung structure**, with slabs suspended from the roof

Proceeding with the original high-reach demolition methodology would have presented a serious risk of **structural instability and uncontrolled collapse**.



## Our Solution & Methodology

### Engineering-Led Review

Upon identification of these issues, Shorts Group paused the original methodology and engaged structural engineers to undertake a **global stability assessment** and review the impact of demolition at each stage.

### Revised Demolition Strategy

The demolition methodology was fundamentally revised and included:

- Introduction of **temporary works** to provide stability during demolition
- Adoption of a **top-down demolition sequence** to first-floor level
- Controlled removal of suspended slabs hung from the roof structure
- Use of **remote-controlled demolition plant** to safely reduce loadings

Once the building had been stabilised and loadings reduced, the remaining structure was **safely demolished using high-reach plant**.

### Protection Measures

To protect the Grade II listed County Hall:

- Structural separations were formed at both ends of the computer building
- **Scaffold protection with fully boarded elevations** was installed to act as a physical barrier
- Demolition sequencing and plant selection were carefully managed to minimise vibration and risk





## Outcomes & Learning

- ✓ Critical structural risks identified through thorough pre-demolition inspections
- ✓ Methodology safely revised to reflect actual site conditions
- ✓ No damage to the Grade II listed building
- ✓ Elimination of uncontrolled collapse risk
- ✓ Project delivered **within the 30-week programme** and **within the budget**

### Learning Outcome:

This project highlights the importance of **robust pre-demolition inspections, engineering-led methodology reviews,** and the flexibility to adapt demolition strategies when unforeseen structural conditions are identified.

