

## Strengthening Structures | Protecting Lives Worldwide.











**Transportation** 

**Buildings** 

**Pipelines** 

Waterfront

Industry



Project: Concrete Repairs &
Retaining Wall
Strengthening of a Mayfair
Building

Location: Mayfair, London, UK

**Client: McLaren Construction** 

Contract Duration: 3 weeks

## Concrete Repairs & Retaining Wall Strengthening of a Mayfair Building, Mayfair, London, UK

McLaren Projects of London requested us to carry out Carbon Fibre Strengthening to a retaining wall on their exclusive residential project in Mayfair. The project included excavation below street level to allow for two underground car parks, a swimming pool and gymnasium and as such the retaining wall below street level required strengthening.

The proposed maximum bending moment in the horizontal direction of the wall as been determined by the clients engineer was 19.95kNm (un-factored). In order to accommodate this, an area of carbon fibre strengthening was calculated of 2no 200mm wide FRP fabric strips, they were applied at 400mm centres up the full height of the wall.

Concrete repairs and surface preparation was carried out by Fibrwrap UK before the application of the Carbon Fibre Strengthening, the whole scheme was finished in 3 weeks. Following completion of the FRP strengthening a layer of Tyfo CFP fire protection system for FRP was applied to the area.

## Scope of Works:

- Concrete Repairs and Carbon Fibre Strengthening of Retaining Wall
- Fire Protection of the Cabron
   Fibre using Tyfo CFP protection
   system





