NORTHUMBERLAND DEVELOPMENT PROJECT, NEW STADIUM
LONDON, UK

This project will see Tottenham Hotspur Football Club's current stadium at White Hart Lane, replaced by a world class UEFA/FIFA compliant arena. The new stadium will increase spectator capacity from 36,240 to 61,000 and provide Tottenham Hotspur FC with state of the art facilities designed to support football matches, NFL games, music concerts, and private events such as conferences and banquets.

BuroHappold Engineering is providing multidisciplinary services from concept through to completion on this project. Our client is keen to minimise the impact of the work on fans and also to preserve its vital revenue stream. For these reasons, finding ways to ensure the old stadium remains in use, while the new developments are taking place are imperative.

BuroHappold’s blast specialists have worked closely with the project architect, the club’s security stakeholders and the police to integrate blast protection within the fabric of the structure.

Using our “bottom up” approach to protective design we assessed the ability of the baseline building design to meet the project requirements. Shortfalls in performance were analysed using our cost-protective benefit methods to provide effective and value driven enhancements to the structure. Our blast engineering team is made up of structural experts who understand how to practically and sensitively integrate protection measures in a cost effective manner; balancing risk, cost and performance to meet client and stakeholder requirements.

Services included on the project included: stakeholder engagement, facade analysis, whole building response to blast, computational fluid dynamics (CFD), structural risk assessments.